



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

Traffic Safety Facts 1998



**A Compilation of Motor Vehicle Crash Data
from the Fatality Analysis Reporting System
and the General Estimates System**

1998 National Statistics

Motor Vehicle Traffic Crashes

Fatal	37,081
Injury	2,029,000
Property Damage Only	4,269,000
Total	6,335,000

Traffic Crash Victims

	Killed	Injured
Occupants		
Drivers	24,729	2,048,000
Passengers	10,519	1,014,000
Unknown	111	<500
Nonmotorists		
Pedestrians	5,220	69,000
Pedalcyclists	761	53,000
Other/Unknown	131	8,000
Total	41,471	3,192,000

Other National Statistics

Vehicle Miles Traveled	2,618,701,000,000
Resident Population	270,298,524
Registered Vehicles	NA
Licensed Drivers	NA
Economic Cost of Traffic Crashes (1994) (estimate for reported and unreported crashes)	\$150.5 billion

National Rates: Fatalities

Fatalities per 100 Million Vehicle Miles Traveled	1.6
Fatalities per 100,000 Population	15.34
Fatalities per 100,000 Registered Vehicles	NA
Fatalities per 100,000 Licensed Drivers	NA

National Rates: Injured Persons

Injured Persons per 100 Million Vehicle Miles Traveled	122
Injured Persons per 100,000 Population	1,181
Injured Persons per 100,000 Registered Vehicles	NA
Injured Persons per 100,000 Licensed Drivers	NA

NA = not available.

Sources: Crashes, Fatalities, Injuries, and Costs—National Highway Traffic Safety Administration.

Population—U.S. Bureau of the Census.

Vehicle Miles Traveled—Federal Highway Administration.

Registered Vehicles—R.L. Polk & Co. and Federal Highway Administration.

Cover Photo—In a two-vehicle crash that occurred in Fairfax County, Virginia, this pickup truck was struck head-on by another vehicle, which had swerved across the center of the road to avoid colliding with traffic that had come to a stop. The driver of the pickup truck, who was restrained at the time of the crash, survived with serious leg injuries. Photographer: Detective James D. Bean, Fairfax County Police Department, Accident Reconstruction Section.



DOT HS 808 983

**Traffic Safety Facts 1998:
A Compilation of Motor Vehicle Crash Data
from the Fatality Analysis Reporting System
and the General Estimates System**

National Highway Traffic Safety Administration
National Center for Statistics and Analysis
U.S. Department of Transportation
Washington, DC 20590

October 1999

ADMINISTRATOR'S MESSAGE

Dear Reader,

The National Highway Traffic Safety Administration is pleased to present its *Traffic Safety Facts 1998: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*. This report combines data from two of our key crash databases, providing statistics on traffic crashes of all severities.

The mission of the National Highway Traffic Safety Administration is to reduce deaths, injuries, and economic losses from motor vehicle crashes. Fortunately, much progress has been made in reducing the number of deaths and serious injuries on our nation's highways. In 1998, the fatality rate per 100 million vehicle miles of travel remained at a historic low of 1.6, the same as in 1997. More than 6.3 million police-reported motor vehicle crashes occurred on our highways in 1998—one every 5 seconds. On average, a person was injured in these crashes every 10 seconds, and someone was killed every 13 minutes.

Information about these crashes, such as the tables in this report, helps us better understand the problem and develop effective solutions. Reducing these numbers requires the continued efforts of state, local, and federal organizations working toward this common goal.

The National Highway Traffic Safety Administration is committed to keeping highway safety high on the list of national priorities.

I hope you find this publication useful.

Sincerely,

Ricardo Martinez, M.D.
Administrator
National Highway Traffic Safety Administration

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INTRODUCTION

In this annual report, *Traffic Safety Facts 1998: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*, the National Highway Traffic Safety Administration (NHTSA) presents descriptive statistics about traffic crashes of all severities, from those that result in property damage to those that result in the loss of human life.

Information from two of NHTSA's primary data systems has been combined to create a single source for motor vehicle crash statistics. The first data system, the Fatality Analysis Reporting System (FARS), is probably the better known of the two sources. Established in 1975, FARS contains data on the most severe traffic crashes, those in which someone was killed. The second source is the National Automotive Sampling System General Estimates System (GES), which began operation in 1988. GES contains data from a nationally representative sample of police-reported crashes of all severities, including those that result in death, injury, or property damage. The next two sections provide a brief description of FARS and GES.

Both systems were designed and developed by NHTSA's National Center for Statistics and Analysis (NCSA) to provide an overall measure of highway safety, to help identify traffic safety problems, to suggest solutions, and to help provide an objective basis on which to evaluate the effectiveness of motor vehicle safety standards and highway safety initiatives. Data from these systems are used to answer requests for information from the international and national highway traffic safety communities, including state and local governments, the Congress, Federal agencies, research organizations, industry, the media, and private citizens.



FARS OPERATIONS

FARS, which became operational in 1975, contains data on a census of fatal traffic crashes within the 50 states, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public, and must result in the death of an occupant of a vehicle or a nonmotorist within 30 days of the crash.

NHTSA has a cooperative agreement with an agency in each state's government to provide information on all qualifying fatal crashes in the state. These agreements are managed by Regional Contracting Officer's Technical Representatives located in the 10 NHTSA Regional Offices. Trained state employees, called "FARS analysts," are responsible for gathering, translating, and transmitting their state's data to NCSA in a standard format. The number of analysts varies by state, depending on the number of fatal crashes and the ease of obtaining data.

FARS data are obtained solely from the state's existing documents:

Police Accident Reports	Death Certificates
State Vehicle Registration Files	Coroner/Medical Examiner Reports
State Driver Licensing Files	Hospital Medical Reports
State Highway Department Data	Emergency Medical Service Reports
Vital Statistics	

From these documents, the analysts code more than 100 FARS data elements. (See Appendix A for a list of the FARS data elements.) The specific data elements may be modified slightly each year to conform to changing user needs, vehicle characteristics, and highway safety emphasis areas. The data collected within FARS do not include any personal identifying information, such as names, addresses, or social security numbers. Thus, any data kept in FARS files and made available to the public fully conform to the Privacy Act.

Each analyst enters data into a local microcomputer data file, and weekly updates are sent to NHTSA's central computer database. Data are automatically checked when entered for acceptable range values and for consistency, enabling the analyst to make corrections immediately. Several programs continually monitor and improve the completeness and accuracy of the data. The 1998 FARS data file used for the statistics in this report was created in June 1999; however, the 1998 FARS file will *officially* close on January 15, 2000. This additional time provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts. The updated final counts for 1997 are reflected in this report. The updated final counts for 1998 will be reflected in the 1999 annual report.



GES OPERATIONS

GES data are obtained from a nationally representative probability sample selected from all police-reported crashes. The system began operation in 1988. To be eligible for the GES sample, a police accident report (PAR) must be completed for the crash, and the crash must involve at least one motor vehicle traveling on a trafficway and result in property damage, injury, or death. Although various sources suggest that about half the motor vehicle crashes in the country are not reported to police, the majority of these unreported crashes involve only minor property damage and no significant personal injury. By restricting attention to police-reported crashes, the GES concentrates on those crashes of greatest concern to the highway safety community and the general public.

GES data collectors make weekly visits to approximately 400 police jurisdictions in 60 sites across the United States, where they randomly sample about 50,000 PARs per year. The collectors obtain copies of the PARs and send them to a central contractor for coding. No other data are collected beyond the selected PARs—no driver license, vehicle registration, or medical information is obtained.

Trained data entry personnel interpret and code data directly from the PARs into an electronic data file. Approximately 90 data elements are coded into a common format. (See Appendix B for a list of the GES data elements.) Some elements are modified every other year to meet the changing needs of the highway safety community. To protect individual privacy, no personal information (names, addresses, specific crash locations) is coded. During data coding, the data are checked electronically for validity and consistency. After the data file is created, further quality checks are performed on the data through computer processing and by the data coding supervisors. The 1998 file used for the statistics in this report was completed in July 1999.



ABOUT THIS REPORT

Fatal crash data from FARS and nonfatal crash data from GES are presented in this report in five chapters. Chapter 1, "Trends," presents data from all years of FARS (1975 through 1998) and GES (1988 through 1998). The remaining chapters present data only from 1998. Chapter 2, "Crashes," describes general characteristics of crashes, such as when and how often they occurred, where they occurred, and what happened during the crash. Chapter 3, "Vehicles," concentrates on the types of vehicles involved in crashes and the damage to the vehicles. Chapter 4, "People," is the largest chapter of this report, with statistics about drivers, passengers, pedestrians, and pedalcyclists. The last chapter of the report, "States," contains information about crashes for each state, the District of Columbia, and Puerto Rico. Terms used throughout the report are defined in the Glossary.

About three-quarters of the tables in this report present data from both FARS and GES. The remaining tables contain FARS data only. Statistics describing fatal crashes or fatalities have been derived from FARS. Statistics describing injury crashes, property-damage-only crashes, or nonfatal injuries have been derived from GES. The reader should be aware that FARS numbers are actual counts of fatalities or fatal crashes, whereas GES numbers are estimates of counts of crashes and injuries and are subject to sampling and nonsampling errors. (See Appendix C for more information on these errors.) To emphasize this difference, FARS numbers are not rounded, while GES estimates have been rounded to the nearest thousand. As a result of the rounding, for some tables, the sum of the row or column entries may not equal the row or column total. In addition, percentages have been calculated prior to rounding.

The reader may also notice that many tables have rows or footnotes for unknowns for FARS data, but not for GES data. The reason for this difference is that almost all the GES unknown data have been assigned values through complex statistical procedures. FARS unknown data, on the other hand, are not assigned values, with the exception of blood alcohol concentration (BAC) test results. BAC values have been assigned to drivers and nonoccupants involved in fatal crashes when the alcohol test results are unknown. A complete description of the statistical procedures used for unknown data in GES and for unknown alcohol test results in FARS can be found in two technical reports: *Imputation in the General Estimates System* (DOT HS 807 985) and *A Method for Estimating Posterior BAC Distributions for Persons Involved in Fatal Traffic Accidents* (DOT HS 807 094). These reports are available from the National Center for Statistics and Analysis (NCSA) at the address given in the following section.

Changes from Last Year's Report

In this year's report, estimates of injury and property-damage-only crashes from the General Estimates System (GES) for the years 1996 and 1997 have been revised from those published in earlier editions of *Traffic Safety Facts*. In 1996, NHTSA adopted new procedures for accounting for the changes in the distribution of crashes in the GES. It was decided that adjustments would be made to the weight assigned for each primary sampling unit (PSU) in the GES every 3 years. Effective in 1998, new weights were implemented. The implementation of the new weights resulted in slight decreases in the estimated numbers of crashes, vehicles involved, and persons involved for 1996 and 1997 compared with the estimates published previously. Appendix C of this report provides detailed information about the revisions and their effects on the estimates.



DATA AVAILABILITY

While this report presents a wide spectrum of information in more than 100 tables and figures, it contains only a fraction of the data available from FARS and GES. Additional data from FARS (1975 through 1998) or from GES (1988 through 1998) are available in four ways:

- Modest requests for specific data will be answered by NCSA at no charge. Response usually requires about 2 weeks, depending on the nature and complexity of the data requested.
- Computer tapes or compact disks can be purchased in one of several formats amenable to analysis. This will enable you to process the data using your own computer system. Information on acquiring the tapes is available by contacting the NCSA at the address below.
- FARS and GES data can be obtained by downloading any of the published files from the Internet, at <ftp://www.nhtsa.dot.gov>. The files are available in SAS and sequential ASCII file formats. This will enable you to process the data using your own computer system.
- FARS data can also be accessed on the world wide web at www-fars.nhtsa.dot.gov. This web site provides instant access to the 1994 through 1998 FARS data via the Query Engine, Wizard, and Reports Library. The Query Engine will enable you to process the data using our interactive user interface. The Query Wizard is an inventory of popularly requested statistical reports not included in NHTSA official publications. These are national reports that may be customized by selection to state, county, or city jurisdictions. The Reports Library, which contains NHTSA's published reports (including this publication) provides searchable and browseable access to NCSA's reports on crashes.

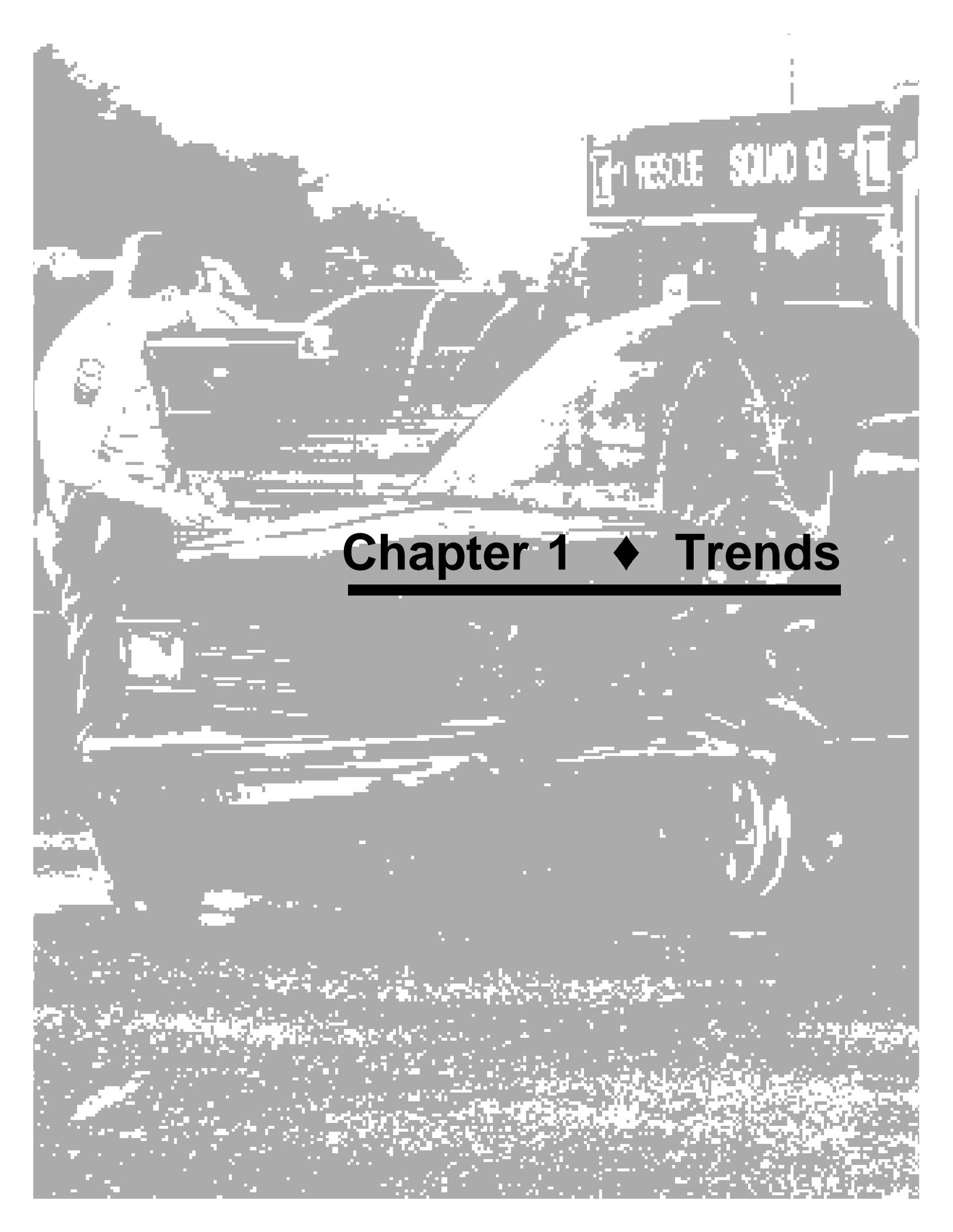
Requests for more information from FARS or GES or for a copy of the data files, should be directed to:

National Highway Traffic Safety Administration
National Center for Statistics and Analysis
NRD-31
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-4198 or 1-800-934-8517
(202) 366-7078 (FAX)

Auto Safety Hotline

To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

Additional information on all NHTSA's data files, including FARS and GES, can be found on the NCSA world wide web site: www.nhtsa.dot.gov/people/ncsa. Current fact sheets, as well as recent NCSA research notes and abstracts of technical reports, can be downloaded in portable document format (.pdf). A traffic safety overview is also provided, with information from several fact sheets and data on lives saved by different types of passenger restraints. Comments and suggestions about the NCSA web site can be e-mailed to the following address: ncsaweb@nhtsa.dot.gov.



Chapter 1 ♦ Trends



1. TRENDS

The tables in this chapter present statistics about motor vehicle crashes over time. Trends for fatal crashes and fatalities generally are presented from 1975 (when FARS began operation) to 1998; however, tables with alcohol data from FARS show data only for the years these data are available—1982 to 1998. Trends for nonfatal crashes and injured are presented from 1988 (when GES began operation) to 1998. Care should be taken when comparing nonfatal crash and injury statistics from one year to the next. Since the statistics derived from GES data are estimates, year-to-year differences may be the result of the sampling process, not the result of an actual trend. The variability or sampling errors associated with the estimates must be considered when making any year-to-year comparisons using GES data. (For more information on sampling error, see Appendix C.) Below are some of the statistics you will find in this chapter:

- Fatal crashes dropped slightly (0.7 percent) from 1997 to 1998, and the fatality rate remained at 1.6 fatalities per 100 million vehicle miles of travel in 1998, the same as in 1997.
- The injury rate per 100 million vehicle miles of travel decreased by 6.9 percent from 1997 to 1998.
- The occupant fatality rate per 100,000 population, which declined by 23 percent from 1975 to 1992, increased by 1.5 percent from 1992 to 1998.
- The occupant injury rate per 100,000 population, which declined by 14 percent from 1988 to 1992, decreased by nearly 1 percent from 1992 to 1998.
- The nonmotorist fatality rate per 100,000 population has declined by 43 percent from 1975 to 1998.
- The nonmotorist injury rate per 100,000 population has declined by 39 percent from 1988 to 1998.
- The percent of alcohol-related fatalities has declined from 57 percent in 1982 to 38 percent in 1998.

Figure 1
Fatal Crashes, 1975-1998

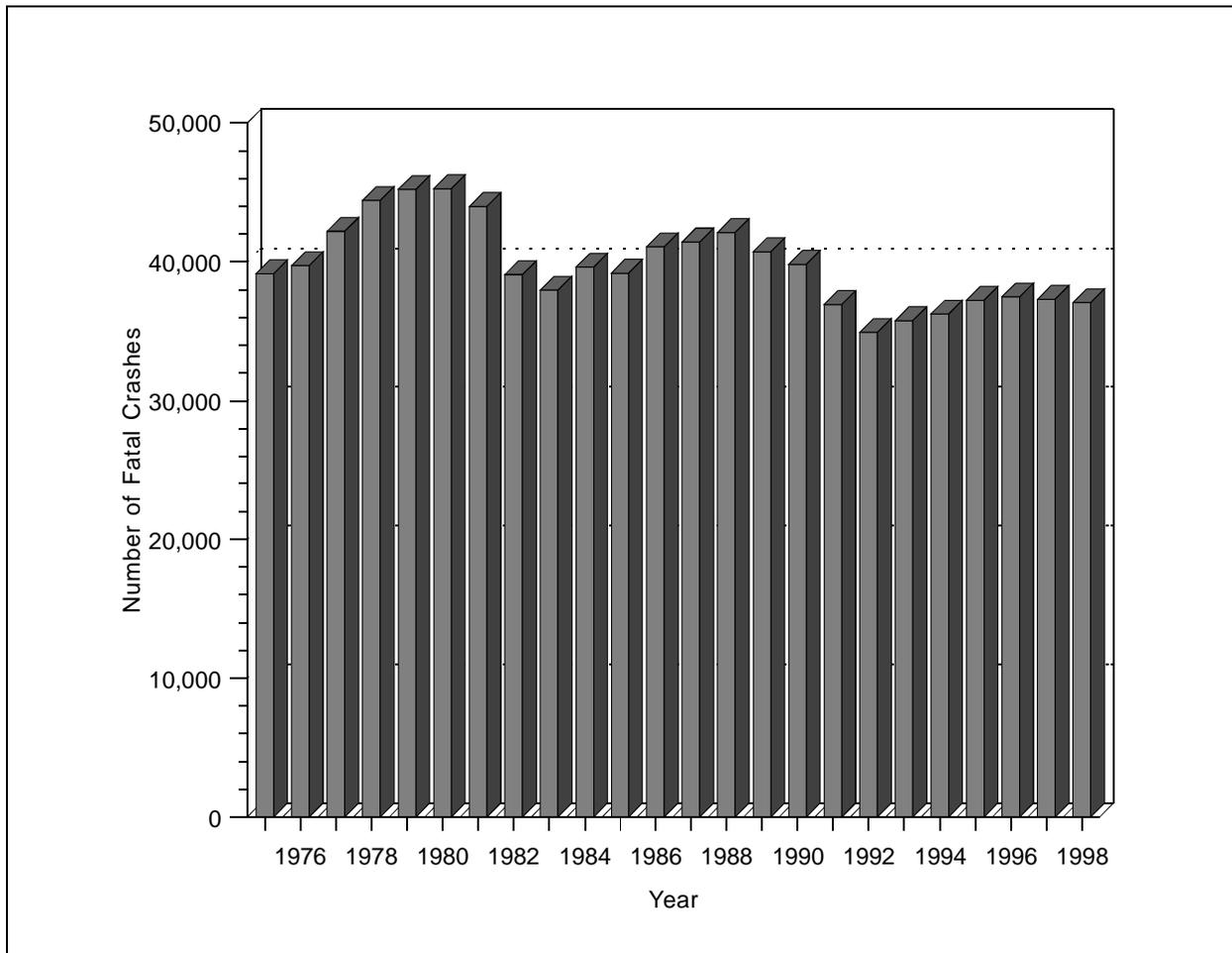


Table 1
Crashes by Crash Severity, 1988-1998

Year	Crash Severity						Total	
	Fatal		Injury		Property Damage Only		Number	Percent
	Number	Percent	Number	Percent	Number	Percent		
1988	42,130	0.6	2,233,000	32.4	4,611,000	67.0	6,887,000	100.0
1989	40,741	0.6	2,153,000	32.4	4,459,000	67.0	6,653,000	100.0
1990	39,836	0.6	2,122,000	32.8	4,309,000	66.6	6,471,000	100.0
1991	36,937	0.6	2,008,000	32.8	4,073,000	66.6	6,117,000	100.0
1992	34,942	0.6	1,991,000	33.2	3,974,000	66.2	6,000,000	100.0
1993	35,780	0.6	2,022,000	33.1	4,048,000	66.3	6,106,000	100.0
1994	36,254	0.6	2,123,000	32.7	4,336,000	66.8	6,496,000	100.0
1995	37,241	0.6	2,217,000	33.1	4,446,000	66.4	6,699,000	100.0
1996	37,494	0.6	2,238,000	33.1	4,494,000	66.4	6,770,000	100.0
1997	37,324	0.6	2,149,000	32.4	4,438,000	67.0	6,624,000	100.0
1998	37,081	0.6	2,029,000	32.0	4,269,000	67.4	6,335,000	100.0

Table 2
Persons Killed or Injured and Fatality and Injury Rates per Population,
Licensed Drivers, Registered Vehicles, and Vehicle Miles Traveled, 1966-1998

Killed									
Year	Fatalities	Resident Population (Thousands)	Fatality Rate per 100,000 Population	Licensed Drivers (Thousands)	Fatality Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Fatality Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Fatality Rate per 100 Million VMT
1966	50,894	196,560	25.89	100,998	50.39	95,703	53.18	926	5.5
1967	50,724	198,712	25.53	103,172	49.16	98,859	51.31	964	5.3
1968	52,725	200,706	26.27	105,410	50.02	102,987	51.20	1,016	5.2
1969	53,543	202,677	26.42	108,306	49.44	107,412	49.85	1,062	5.0
1970	52,627	205,052	25.67	111,543	47.18	111,242	47.31	1,110	4.7
1971	52,542	207,661	25.30	114,426	45.92	116,330	45.17	1,179	4.5
1972	54,589	209,896	26.01	118,414	46.10	122,557	44.54	1,260	4.3
1973	54,052	211,909	25.51	121,546	44.47	130,025	41.57	1,313	4.1
1974	45,196	213,854	21.13	125,427	36.03	134,900	33.50	1,281	3.5
1975	44,525	215,973	20.62	129,791	34.31	126,153	35.29	1,328	3.4
1976	45,523	218,035	20.88	134,036	33.96	130,793	34.81	1,402	3.2
1977	47,878	220,239	21.74	138,121	34.66	134,514	35.59	1,467	3.3
1978	50,331	222,585	22.61	140,844	35.74	140,374	35.85	1,545	3.3
1979	51,093	225,055	22.70	143,284	35.66	144,317	35.40	1,529	3.3
1980	51,091	227,225	22.48	145,295	35.16	146,845	34.79	1,527	3.3
1981	49,301	229,466	21.49	147,075	33.52	149,330	33.01	1,555	3.2
1982	43,945	231,664	18.97	150,234	29.25	151,148	29.07	1,595	2.8
1983	42,589	233,792	18.22	154,389	27.59	153,830	27.69	1,653	2.6
1984	44,257	235,825	18.77	155,424	28.48	158,900	27.85	1,720	2.6
1985	43,825	237,924	18.42	156,868	27.94	166,047	26.39	1,775	2.5
1986	46,087	240,133	19.19	159,486	28.90	168,545	27.34	1,835	2.5
1987	46,390	242,289	19.15	161,816	28.67	172,750	26.85	1,921	2.4
1988	47,087	244,499	19.26	162,854	28.91	177,455	26.53	2,026	2.3
1989	45,582	246,819	18.47	165,554	27.53	181,165	25.16	2,096	2.2
1990	44,599	249,439	17.88	167,015	26.70	184,275	24.20	2,144	2.1
1991	41,508	252,127	16.46	168,995	24.56	186,370	22.27	2,172	1.9
1992	39,250	254,995	15.39	173,125	22.67	184,938	21.22	2,247	1.7
1993	40,150	257,746	15.58	173,149	23.19	188,350	21.32	2,296	1.7
1994	40,716	260,289	15.64	175,403	23.21	192,497	21.15	2,358	1.7
1995	41,817	262,765	15.91	176,628	23.68	197,065	21.22	2,423	1.7
1996	42,065	265,190	15.86	179,539	23.43	201,631	20.86	2,486	1.7
1997	42,013	267,744	15.69	182,709	22.99	203,568	20.64	2,560	1.6
1998	41,471	270,299	15.34	NA	--	NA	--	2,619	1.6

Injured									
Year	Injured	Resident Population (Thousands)	Injury Rate per 100,000 Population	Licensed Drivers (Thousands)	Injury Rate per 100,000 Licensed Drivers	Registered Motor Vehicles (Thousands)	Injury Rate per 100,000 Registered Vehicles	Vehicle Miles Traveled (Billions)	Injury Rate per 100 Million VMT
1988	3,416,000	244,499	1,397	162,854	2,098	177,455	1,925	2,026	169
1989	3,284,000	246,819	1,330	165,554	1,984	181,165	1,813	2,096	157
1990	3,231,000	249,439	1,295	167,015	1,934	184,275	1,753	2,144	151
1991	3,097,000	252,127	1,228	168,995	1,833	186,370	1,662	2,172	143
1992	3,070,000	254,995	1,204	173,125	1,773	184,938	1,660	2,247	137
1993	3,149,000	257,746	1,222	173,149	1,819	188,350	1,672	2,296	137
1994	3,266,000	260,289	1,255	175,403	1,862	192,497	1,697	2,358	139
1995	3,465,000	262,765	1,319	176,628	1,962	197,065	1,758	2,423	143
1996	3,483,000	265,190	1,314	179,539	1,940	201,631	1,728	2,486	140
1997	3,348,000	267,744	1,250	182,709	1,832	203,568	1,644	2,560	131
1998	3,192,000	270,299	1,181	NA	--	NA	--	2,619	122

NA = not available.

Source: Vehicle Miles of Travel and Licensed Drivers Federal Highway Administration; Registered Vehicles, 1966-1974 Federal Highway Administration; Registered Vehicles, 1975-1998 R.L. Polk & Co.; Population U.S. Bureau of the Census; Traffic Deaths, 1966-1974 National Center for Health Statistics, D.H.H.S., State Accident Summaries (adjusted to 30-day traffic deaths by NHTSA); Traffic Deaths, 1975-1998 Fatality Analysis Reporting System (FARS), NHTSA, 30-day traffic deaths; Injured, 1988-1998 General Estimates System (GES), NHTSA. Injury data not available for years before 1988.

Figure 2
Motor Vehicle Fatality and Injury Rates
per 100 Million Vehicle Miles Traveled, 1966-1997

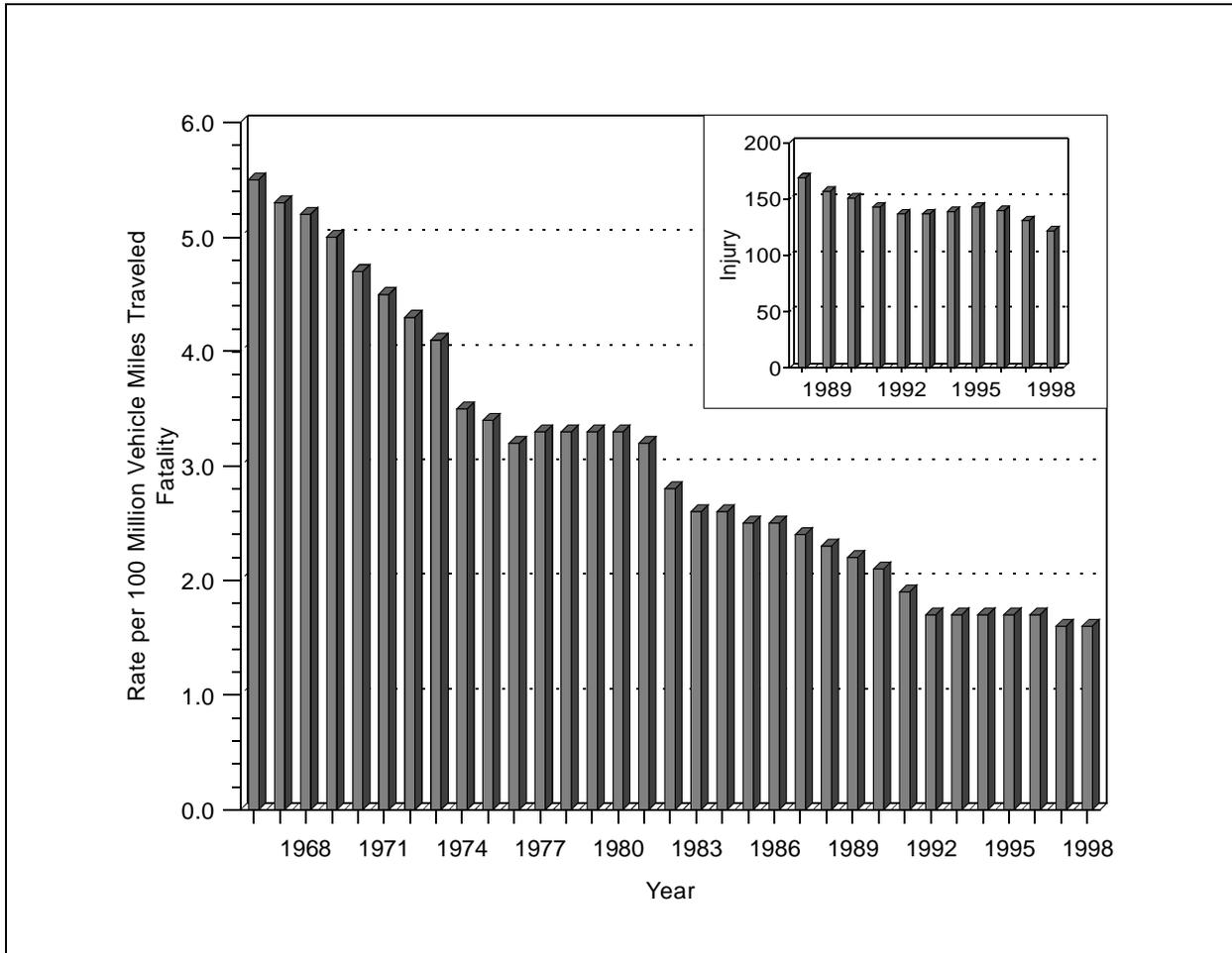


Table 3
Vehicles Involved in Crashes and Involvement Rates per Vehicle Miles of Travel and per Registered Vehicle
by Vehicle Type and Crash Severity, 1975-1998

Year	Vehicle Type											
	Passenger Cars			Light Trucks			Large Trucks			Motorcycles		
	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles	Number	Involvement Rate per 100 Million VMT	Involvement Rate per 100,000 Registered Vehicles
Fatal Crashes												
1975	37,897	3.7	40.11	8,636	4.2	41.35	3,977	4.9	74.16	3,265	58.0	65.77
1976	37,206	3.5	38.35	9,300	4.0	40.80	4,435	5.2	79.55	3,343	55.7	67.76
1977	39,038	3.5	39.45	10,400	4.0	42.57	5,164	5.4	90.76	4,164	65.6	84.41
1978	40,544	3.6	39.81	11,898	4.1	43.61	5,759	5.4	98.28	4,643	64.9	95.38
1979	39,999	3.6	38.63	12,544	4.3	43.36	6,084	5.6	103.27	4,916	56.9	90.67
1980	39,059	3.5	37.28	12,680	4.3	42.18	5,379	5.0	92.89	5,194	50.9	91.22
1981	38,864	3.5	36.66	12,331	4.0	39.48	5,230	4.8	91.49	4,963	46.4	85.11
1982	34,334	3.0	32.11	11,317	3.5	35.03	4,646	4.2	83.11	4,495	45.4	78.12
1983	33,298	2.8	30.52	11,118	3.3	33.62	4,877	4.2	88.54	4,302	49.1	77.03
1984	34,648	2.8	30.89	11,973	3.3	33.96	5,124	4.2	94.87	4,659	53.0	85.02
1985	34,277	2.7	29.46	12,464	3.2	33.09	5,153	4.2	85.94	4,608	50.7	84.64
1986	36,195	2.8	30.87	13,327	3.2	33.52	5,097	4.0	89.09	4,570	48.6	87.90
1987	36,580	2.8	30.52	14,514	3.3	34.81	5,108	3.8	89.33	4,067	42.8	83.24
1988	36,977	2.7	30.43	15,286	3.1	34.27	5,241	3.8	85.40	3,715	37.1	81.04
1989	35,410	2.5	28.85	15,700	3.0	33.31	4,984	3.5	80.05	3,192	30.8	72.21
1990	34,085	2.4	27.65	15,620	2.8	31.29	4,776	3.3	77.08	3,276	34.3	76.91
1991	31,291	2.2	25.37	14,832	2.5	28.49	4,347	2.9	70.43	2,829	30.8	67.72
1992	29,817	2.1	24.78	14,648	2.3	27.21	4,035	2.6	66.75	2,439	25.5	60.00
1993	30,233	2.1	24.97	15,332	2.3	27.10	4,328	2.7	71.09	2,477	25.0	62.27
1994	30,273	2.1	24.81	16,353	2.3	27.49	4,644	2.7	70.49	2,339	22.8	62.26
1995	30,940	2.1	25.11	17,587	2.3	28.13	4,472	2.5	66.55	2,268	23.1	58.20
1996	30,727	2.0	24.66	18,246	2.3	27.88	4,755	2.6	67.81	2,176	21.9	56.20
1997	30,059	2.0	24.11	18,628	2.3	27.68	4,917	2.6	69.42	2,160	21.4	56.45
1998	28,992	--	--	19,217	--	--	4,935	--	--	2,324	--	--
Injury Crashes												
1988	3,073,000	222	2,529	683,000	140	1,530	96,000	69	1,562	98,000	974	2,129
1989	2,892,000	204	2,355	727,000	139	1,543	110,000	77	1,770	76,000	732	1,717
1990	2,838,000	199	2,302	729,000	131	1,460	107,000	73	1,730	82,000	854	1,916
1991	2,615,000	185	2,120	789,000	132	1,515	78,000	52	1,264	79,000	856	1,882
1992	2,640,000	184	2,194	758,000	118	1,409	95,000	62	1,567	61,000	642	1,509
1993	2,631,000	182	2,174	843,000	125	1,490	97,000	60	1,585	56,000	565	1,407
1994	2,785,000	191	2,283	912,000	128	1,533	96,000	56	1,452	54,000	526	1,433
1995	2,914,000	197	2,365	1,024,000	137	1,638	84,000	47	1,244	52,000	530	1,331
1996	2,884,000	192	2,314	1,071,000	136	1,636	94,000	51	1,339	51,000	512	1,312
1997	2,736,000	179	2,195	1,064,000	129	1,582	96,000	50	1,349	51,000	502	1,321
1998	2,545,000	--	--	1,059,000	--	--	89,000	--	--	45,000	--	--
Property-Damage-Only Crashes												
1988	6,050,000	437	4,979	1,542,000	316	3,458	297,000	215	4,839	21,000	207	453
1989	5,678,000	401	4,625	1,613,000	309	3,421	300,000	210	4,825	20,000	188	441
1990	5,485,000	384	4,450	1,654,000	298	3,314	273,000	187	4,411	20,000	208	467
1991	5,084,000	360	4,122	1,675,000	281	3,217	248,000	166	4,022	25,000	268	589
1992	4,852,000	338	4,031	1,704,000	265	3,165	277,000	181	4,586	10,000	100	236
1993	4,789,000	331	3,956	1,884,000	279	3,331	296,000	185	4,861	17,000	169	420
1994	5,126,000	351	4,202	2,023,000	284	3,401	360,000	212	5,467	13,000	128	349
1995	5,335,000	361	4,329	2,149,000	287	3,437	289,000	162	4,307	13,000	131	329
1996	5,281,000	352	4,238	2,274,000	289	3,475	295,000	161	4,209	14,000	138	355
1997	5,116,000	335	4,104	2,314,000	281	3,439	337,000	176	4,761	10,000	102	268
1998	4,896,000	--	--	2,315,000	--	--	318,000	--	--	9,000	--	--

Note: Vehicle miles traveled (VMT) data in this table have been revised and are not based exclusively on Federal Highway Administration (FHWA) data as they have been in earlier reports. The change was made to reflect the different vehicle classification schemes used by FHWA and the National Highway Traffic Safety Administration (NHTSA). For more information, see page 8 of this report.

Sources: Vehicle Miles Traveled—Federal Highway Administration, revised by NHTSA; Registered Passenger Cars and Light Trucks—R.L. Polk & Co; Registered Large Trucks and Motorcycles—Federal Highway Administration.

**Table 4
Persons Killed or Injured, by Person Type and Vehicle Type, 1975-1998**

Year	Person Type											Total
	Occupants by Vehicle Type							Nonmotorists				
	Passenger Cars	Light Trucks	Large Trucks	Motor-cycles	Buses	Other/Unknown	Total	Pedestrian	Pedalcyclist	Other/Unknown	Total	
Killed												
1975	25,929	4,856	961	3,189	53	937	35,925	7,516	1,003	81	8,600	44,525
1976	26,166	5,438	1,132	3,312	73	981	37,102	7,427	914	80	8,421	45,523
1977	26,782	5,976	1,287	4,104	42	959	39,150	7,732	922	74	8,728	47,878
1978	28,153	6,745	1,395	4,577	41	622	41,533	7,795	892	111	8,798	50,331
1979	27,808	7,178	1,432	4,894	39	579	41,930	8,096	932	135	9,163	51,093
1980	27,449	7,486	1,262	5,144	46	540	41,927	8,070	965	129	9,164	51,091
1981	26,645	7,081	1,133	4,906	56	603	40,424	7,837	936	104	8,877	49,301
1982	23,330	6,359	944	4,453	35	525	35,646	7,331	883	85	8,299	43,945
1983	22,979	6,202	982	4,265	53	362	34,843	6,826	839	81	7,746	42,589
1984	23,620	6,496	1,074	4,608	46	440	36,284	7,025	849	99	7,973	44,257
1985	23,212	6,689	977	4,564	57	544	36,043	6,808	890	84	7,782	43,825
1986	24,944	7,317	926	4,566	39	442	38,234	6,779	941	133	7,853	46,087
1987	25,132	8,058	852	4,036	51	436	38,565	6,745	948	132	7,825	46,390
1988	25,808	8,306	911	3,662	54	429	39,170	6,870	911	136	7,917	47,087
1989	25,063	8,551	858	3,141	50	424	38,087	6,556	832	107	7,495	45,582
1990	24,092	8,601	705	3,244	32	460	37,134	6,482	859	124	7,465	44,599
1991	22,385	8,391	661	2,806	31	466	34,740	5,801	843	124	6,768	41,508
1992	21,387	8,098	585	2,395	28	387	32,880	5,549	723	98	6,370	39,250
1993	21,566	8,511	605	2,449	18	425	33,574	5,649	816	111	6,576	40,150
1994	21,997	8,904	670	2,320	18	409	34,318	5,489	802	107	6,398	40,716
1995	22,423	9,568	648	2,227	33	392	35,291	5,584	833	109	6,526	41,817
1996 *	22,505	9,932	621	2,161	21	455	35,695	5,449	765	154	6,368	42,065
1997	22,199	10,249	723	2,116	18	420	35,725	5,321	814	153	6,288	42,013
1998	21,164	10,647	728	2,284	36	500	35,359	5,220	761	131	6,112	41,471
Injured												
1988	2,585,000	478,000	37,000	105,000	15,000	4,000	3,224,000	110,000	75,000	8,000	192,000	3,416,000
1989	2,431,000	511,000	43,000	83,000	15,000	5,000	3,088,000	112,000	73,000	11,000	196,000	3,284,000
1990	2,376,000	505,000	42,000	84,000	33,000	4,000	3,044,000	105,000	75,000	7,000	187,000	3,231,000
1991	2,235,000	563,000	28,000	80,000	21,000	4,000	2,931,000	88,000	67,000	11,000	166,000	3,097,000
1992	2,232,000	545,000	34,000	65,000	20,000	12,000	2,908,000	89,000	63,000	10,000	162,000	3,070,000
1993	2,265,000	601,000	32,000	59,000	17,000	4,000	2,978,000	94,000	68,000	9,000	171,000	3,149,000
1994	2,364,000	631,000	30,000	57,000	16,000	4,000	3,102,000	92,000	62,000	9,000	164,000	3,266,000
1995	2,469,000	722,000	30,000	57,000	19,000	4,000	3,303,000	86,000	67,000	10,000	162,000	3,465,000
1996	2,458,000	761,000	33,000	55,000	20,000	4,000	3,332,000	82,000	58,000	11,000	151,000	3,483,000
1997	2,341,000	755,000	31,000	53,000	17,000	6,000	3,201,000	77,000	58,000	11,000	146,000	3,348,000
1998	2,201,000	763,000	29,000	49,000	16,000	4,000	3,061,000	69,000	53,000	8,000	131,000	3,192,000

* Total for 1996 includes 2 fatalities of unknown person type.

Table 5
Drivers Involved in Crashes and Involvement Rates per Licensed Driver
by Sex and Crash Severity, 1975-1998

Year	Sex						Total (>15 Years Old)*		
	Male (>15 Years Old)			Female (>15 Years Old)			Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers
	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers	Number Involved in Crashes	Licensed Drivers (Thousands)	Involvement Rate per 100,000 Licensed Drivers			
Drivers in Fatal Crashes									
1975	45,087	70,435	64.01	9,356	59,233	15.80	54,445	129,668	41.99
1976	45,091	72,452	62.24	9,953	61,458	16.19	55,045	133,910	41.11
1977	48,548	74,385	65.27	10,775	63,591	16.94	59,324	137,976	43.00
1978	51,665	75,504	68.43	11,221	65,177	17.22	62,887	140,681	44.70
1979	52,208	76,458	68.28	11,308	66,695	16.95	63,518	143,152	44.37
1980	50,921	77,135	66.02	11,353	68,067	16.68	62,277	145,202	42.89
1981	49,838	77,831	64.03	11,396	69,142	16.48	61,238	146,972	41.67
1982	43,877	78,484	55.91	10,579	71,627	14.77	54,462	150,111	36.28
1983	42,329	80,823	52.37	10,854	73,440	14.78	53,184	154,263	34.48
1984	44,213	80,916	54.64	11,806	74,398	15.87	56,022	155,315	36.07
1985	44,290	81,537	54.32	12,031	75,231	15.99	56,322	156,769	35.93
1986	46,083	82,740	55.70	12,603	76,651	16.44	58,688	159,390	36.82
1987	46,337	83,939	55.20	13,492	77,789	17.34	59,829	161,728	36.99
1988	46,840	84,099	55.70	13,814	78,661	17.56	60,658	162,760	37.27
1989	44,941	85,356	52.65	13,927	80,160	17.37	58,870	165,516	35.57
1990	43,802	85,769	51.07	13,586	81,203	16.73	57,393	166,972	34.37
1991	40,288	86,630	46.51	12,716	82,300	15.45	53,007	168,930	31.38
1992	38,186	88,363	43.21	12,492	84,716	14.75	50,682	173,079	29.28
1993	39,118	87,974	44.47	12,960	85,138	15.22	52,080	173,112	30.08
1994	39,784	89,165	44.62	13,449	86,183	15.61	53,238	175,347	30.36
1995	40,799	89,183	45.75	14,043	87,386	16.07	54,847	176,569	31.06
1996	40,899	90,504	45.19	14,723	89,007	16.54	55,624	179,510	30.99
1997	40,594	91,888	44.18	14,816	90,789	16.32	55,412	182,677	30.33
1998	40,360	NA	--	14,937	NA	--	55,300	NA	--
Drivers in Injury Crashes									
1988	2,423,000	84,099	2,881	1,485,000	78,661	1,887	3,907,000	162,760	2,401
1989	2,347,000	85,356	2,749	1,446,000	80,160	1,804	3,793,000	165,516	2,291
1990	2,285,000	85,769	2,664	1,458,000	81,203	1,795	3,743,000	166,972	2,242
1991	2,171,000	86,630	2,506	1,380,000	82,300	1,677	3,551,000	168,930	2,102
1992	2,114,000	88,363	2,392	1,439,000	84,716	1,699	3,553,000	173,079	2,053
1993	2,144,000	87,974	2,437	1,468,000	85,138	1,724	3,612,000	173,112	2,086
1994	2,264,000	89,165	2,539	1,574,000	86,183	1,826	3,838,000	175,347	2,189
1995	2,378,000	89,183	2,667	1,687,000	87,386	1,931	4,066,000	176,569	2,303
1996	2,378,000	90,504	2,627	1,711,000	89,007	1,922	4,089,000	179,510	2,278
1997	2,296,000	91,888	2,499	1,643,000	90,789	1,809	3,939,000	182,677	2,156
1998	2,158,000	NA	--	1,576,000	NA	--	3,734,000	NA	--
Drivers in Property-Damage-Only Crashes									
1988	5,013,000	84,099	5,961	2,816,000	78,661	3,580	7,829,000	162,760	4,810
1989	4,915,000	85,356	5,758	2,687,000	80,160	3,352	7,602,000	165,516	4,593
1990	4,733,000	85,769	5,519	2,677,000	81,203	3,296	7,410,000	166,972	4,438
1991	4,419,000	86,630	5,101	2,600,000	82,300	3,159	7,019,000	168,930	4,155
1992	4,316,000	88,363	4,885	2,530,000	84,716	2,987	6,847,000	173,079	3,956
1993	4,402,000	87,974	5,003	2,561,000	85,138	3,008	6,963,000	173,112	4,022
1994	4,695,000	89,165	5,265	2,828,000	86,183	3,282	7,523,000	175,347	4,290
1995	4,847,000	89,183	5,434	2,905,000	87,386	3,325	7,752,000	176,569	4,390
1996	4,888,000	90,504	5,400	2,968,000	89,007	3,335	7,856,000	179,510	4,376
1997	4,808,000	91,888	5,232	2,967,000	90,789	3,268	7,775,000	182,677	4,256
1998	4,634,000	NA	--	2,902,000	NA	--	7,536,000	NA	--

NA = not available.

* Total includes drivers (>15 years old) of unknown sex.

Source: Licensed Drivers—Federal Highway Administration.

Figure 3
Driver Involvement Rate per 100,000 Licensed Drivers 16 Years and Older,
by Sex and Crash Severity, 1975-1997

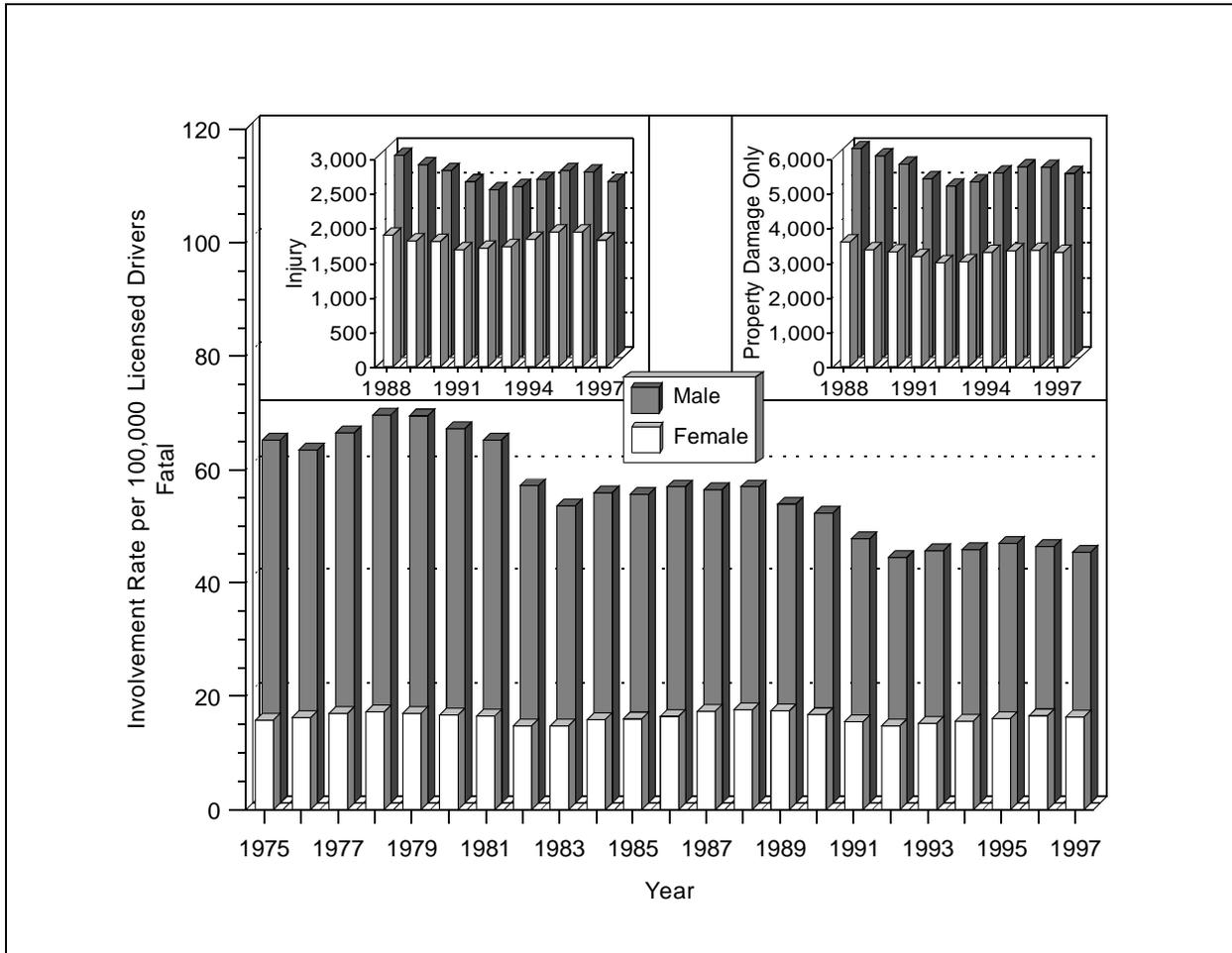


Table 6
Occupant Fatality and Injury Rates per Population by Age Group, 1975-1998

Year	Age Group (Years)											Total
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74	
Fatality Rate per 100,000 Population												
1975	4.50	2.71	5.71	38.77	34.90	21.57	15.67	13.42	13.29	14.72	16.98	16.67
1976	4.50	2.56	6.14	40.95	35.01	21.27	15.27	13.71	13.58	14.92	17.27	17.05
1977	4.68	2.83	6.44	42.86	38.73	22.27	15.61	13.90	13.55	14.03	16.13	17.81
1978	4.61	2.66	6.60	44.45	40.75	24.26	16.72	14.07	13.44	14.79	16.36	18.70
1979	4.35	2.84	6.13	44.36	40.06	24.96	17.11	14.03	13.24	13.59	15.51	18.67
1980	4.24	2.67	6.00	42.94	39.86	24.82	16.85	14.51	12.83	12.96	15.27	18.45
1981	3.75	2.43	5.24	38.56	37.41	24.22	16.63	13.81	12.68	13.16	14.94	17.62
1982	3.67	2.22	4.85	34.51	32.75	20.45	14.30	11.84	11.24	11.85	14.89	15.39
1983	3.55	2.33	4.60	33.18	30.97	19.86	13.87	11.79	10.92	11.92	15.48	14.90
1984	3.13	2.33	5.21	34.94	32.89	20.26	13.91	11.87	11.16	12.98	16.18	15.39
1985	3.18	2.36	5.52	33.72	32.75	19.50	13.87	11.88	11.33	12.63	16.73	15.15
1986	3.42	2.30	6.07	38.16	33.72	21.04	13.82	11.50	11.38	13.46	17.71	15.92
1987	3.78	2.60	6.00	36.65	32.83	21.05	14.15	12.10	11.93	13.58	18.22	15.92
1988	3.82	2.64	5.74	37.95	33.63	20.50	14.20	12.33	12.15	14.12	19.26	16.02
1989	3.93	2.92	5.48	34.71	30.85	20.10	13.89	12.46	12.18	14.24	19.41	15.43
1990	3.30	2.50	5.25	34.14	30.63	19.81	13.34	12.20	11.91	13.36	18.48	14.89
1991	3.13	2.39	4.86	31.76	28.83	17.79	12.29	11.12	10.75	13.22	19.14	13.78
1992	2.99	2.41	4.75	28.38	25.97	16.54	11.71	10.62	10.53	13.27	18.81	12.89
1993	3.14	2.35	4.67	28.99	26.71	16.47	11.86	10.52	10.86	12.73	20.78	13.03
1994	3.46	2.35	5.07	30.47	26.28	16.08	11.79	11.15	10.71	13.99	20.71	13.18
1995	3.17	2.46	5.15	29.58	27.30	17.04	12.49	11.01	11.42	13.67	20.87	13.43
1996	3.40	2.34	5.07	29.44	27.31	16.78	12.60	11.14	11.58	14.20	20.84	13.46
1997	3.16	2.43	4.96	28.39	25.54	16.50	12.23	11.57	11.96	14.46	22.07	13.34
1998	3.03	2.58	4.59	27.60	25.02	15.80	12.59	11.43	11.52	14.30	21.20	13.08
Injury Rate per 100,000 Population												
1988	417	444	734	3,283	2,666	1,800	1,308	1,030	876	710	656	1,319
1989	370	469	727	3,210	2,467	1,672	1,280	985	801	713	617	1,251
1990	329	430	674	3,110	2,495	1,672	1,227	989	845	750	514	1,220
1991	384	470	709	2,921	2,317	1,574	1,144	977	801	727	521	1,162
1992	323	438	686	2,989	2,253	1,573	1,101	971	783	722	586	1,140
1993	367	472	658	2,885	2,308	1,606	1,195	956	821	707	592	1,156
1994	411	468	706	2,959	2,369	1,668	1,225	987	857	756	598	1,192
1995	418	483	743	3,194	2,457	1,723	1,291	1,132	927	755	624	1,257
1996	418	533	731	3,133	2,432	1,766	1,295	1,085	904	788	654	1,256
1997	400	461	684	2,982	2,402	1,689	1,257	1,012	815	761	640	1,196
1998	403	440	677	2,781	2,124	1,585	1,157	1,029	872	696	587	1,133

Note: Population estimates for historical years are periodically revised by the U.S. Census Bureau.

Table 7
Passenger Car Occupants Killed or Injured and Fatality and Injury Rates
per Registered Vehicle and Vehicle Miles of Travel, 1975-1998

Year	Registered Passenger Cars	Vehicle Miles Traveled (Millions)	Passenger Car Occupants Killed	Fatality Rate per 100,000 Registered Passenger Cars	Fatality Rate per 100 Million VMT	Passenger Car Occupants Injured	Injury Rate per 100,000 Registered Passenger Cars	Injury Rate per 100 Million VMT
1975	94,478,029	1,030,376	25,929	27.44	2.5	*	*	*
1976	97,011,684	1,070,667	26,166	26.97	2.4	*	*	*
1977	98,967,665	1,102,726	26,782	27.06	2.4	*	*	*
1978	101,855,551	1,136,459	28,153	27.64	2.5	*	*	*
1979	103,543,788	1,111,705	27,808	26.86	2.5	*	*	*
1980	104,770,998	1,107,056	27,449	26.20	2.5	*	*	*
1981	106,002,720	1,122,092	26,645	25.14	2.4	*	*	*
1982	106,936,590	1,145,828	23,330	21.82	2.0	*	*	*
1983	109,085,444	1,187,760	22,979	21.07	1.9	*	*	*
1984	112,177,361	1,226,461	23,620	21.06	1.9	*	*	*
1985	116,348,085	1,248,981	23,212	19.95	1.9	*	*	*
1986	117,268,114	1,277,550	24,944	21.27	2.0	*	*	*
1987	119,848,784	1,328,460	25,132	20.97	1.9	*	*	*
1988	121,519,139	1,384,047	25,808	21.24	1.9	2,585,000	2,127	187
1989	122,758,478	1,415,213	25,063	20.42	1.8	2,431,000	1,980	172
1990	123,276,600	1,427,178	24,092	19.54	1.7	2,376,000	1,928	167
1991	123,327,336	1,411,655	22,385	18.15	1.6	2,235,000	1,812	158
1992	120,346,747	1,436,035	21,387	17.77	1.5	2,232,000	1,854	155
1993	121,055,398	1,445,106	21,566	17.81	1.5	2,265,000	1,871	157
1994	121,996,580	1,459,208	21,997	18.03	1.5	2,364,000	1,937	162
1995	123,241,881	1,478,352	22,423	18.19	1.5	2,469,000	2,004	167
1996	124,612,787	1,499,139	22,505	18.06	1.5	2,458,000	1,973	164
1997	124,672,920	1,527,634	22,199	17.81	1.5	2,341,000	1,877	153
1998	NA	NA	21,164	--	--	2,201,000	--	--

* Injury data not available before 1988.

NA = not available.

Note: Vehicle miles traveled (VMT) data in this table have been revised and are not based exclusively on Federal Highway Administration (FHWA) data as they have been in earlier reports. The change was made to reflect the different vehicle classification schemes used by FHWA and the National Highway Traffic Safety Administration (NHTSA). For more information, see page 8 of this report.

Sources: Vehicle Miles Traveled—Federal Highway Administration, revised by NHTSA; Registered Vehicles—R.L. Polk & Co.

Figure 4
Passenger Car Occupant Fatality and Injury Rates
per 100 Million Vehicle Miles Traveled, 1975-1997

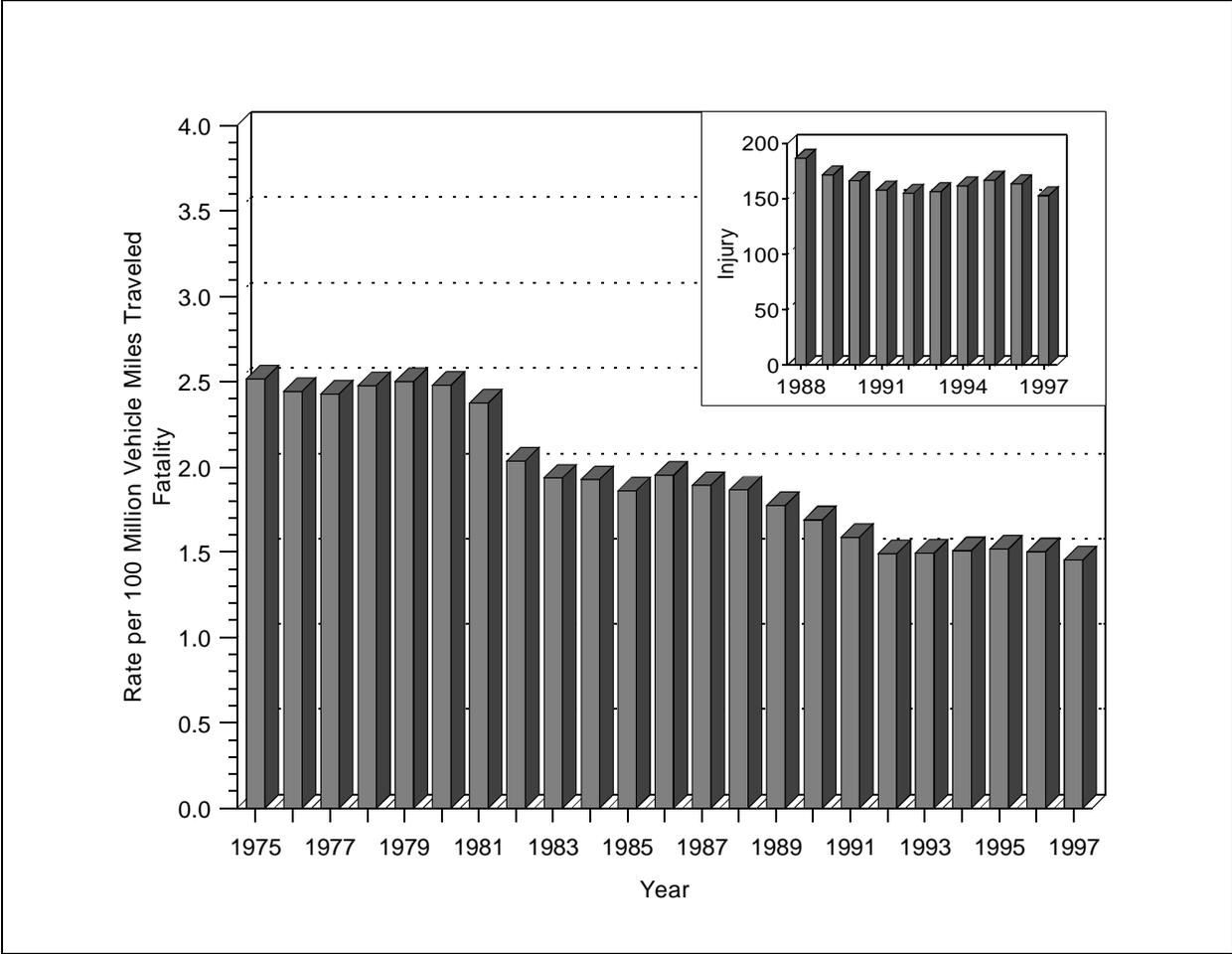


Table 8
Light Truck Occupants Killed or Injured and Fatality and Injury Rates
per Registered Vehicle and Vehicle Miles of Travel, 1975-1998

Year	Registered Light Trucks	Vehicle Miles Traveled (Millions)	Light Truck Occupants Killed	Fatality Rate per 100,000 Registered Light Trucks	Fatality Rate per 100 Million VMT	Light Truck Occupants Injured	Injury Rate per 100,000 Registered Light Trucks	Injury Rate per 100 Million VMT
1975	20,886,680	204,274	4,856	23.25	2.4	*	*	*
1976	22,794,702	233,382	5,438	23.86	2.3	*	*	*
1977	24,432,701	257,108	5,976	24.46	2.3	*	*	*
1978	27,285,497	289,463	6,745	24.72	2.3	*	*	*
1979	28,932,820	293,840	7,178	24.81	2.4	*	*	*
1980	30,060,754	295,475	7,486	24.90	2.5	*	*	*
1981	31,236,287	307,583	7,081	22.67	2.3	*	*	*
1982	32,307,692	322,026	6,359	19.68	2.0	*	*	*
1983	33,068,138	334,937	6,202	18.76	1.9	*	*	*
1984	35,257,788	358,588	6,496	18.42	1.8	*	*	*
1985	37,665,180	388,778	6,689	17.76	1.7	*	*	*
1986	39,763,446	416,532	7,317	18.40	1.8	*	*	*
1987	41,695,017	444,392	8,058	19.33	1.8	*	*	*
1988	44,599,500	488,431	8,306	18.62	1.7	478,000	1,071	98
1989	47,134,148	522,483	8,551	18.14	1.6	511,000	1,084	98
1990	49,916,497	555,659	8,601	17.23	1.5	505,000	1,012	91
1991	52,062,064	595,924	8,391	16.12	1.4	563,000	1,081	94
1992	53,836,046	642,397	8,098	15.04	1.3	545,000	1,012	85
1993	56,573,835	675,353	8,511	15.04	1.3	601,000	1,062	89
1994	59,485,995	711,515	8,904	14.97	1.3	631,000	1,061	89
1995	62,520,872	749,971	9,568	15.30	1.3	722,000	1,156	96
1996	65,438,877	787,255	9,932	15.18	1.3	761,000	1,164	97
1997	67,287,470	824,482	10,249	15.23	1.2	755,000	1,122	92
1998	NA	NA	10,647	--	--	763,000	--	--

* Injury data not available before 1988.

NA = not available.

Note: Vehicle miles traveled (VMT) data in this table have been revised and are not based exclusively on Federal Highway Administration (FHWA) data as they have been in earlier reports. The change was made to reflect the different vehicle classification schemes used by FHWA and the National Highway Traffic Safety Administration (NHTSA). For more information, see page 8 of this report.

Sources: Vehicle Miles Traveled—Federal Highway Administration, revised by NHTSA; Registered Vehicles—R.L. Polk & Co.

Figure 5
Light Truck Occupant Fatality and Injury Rates
per 100 Million Vehicle Miles Traveled, 1975-1997

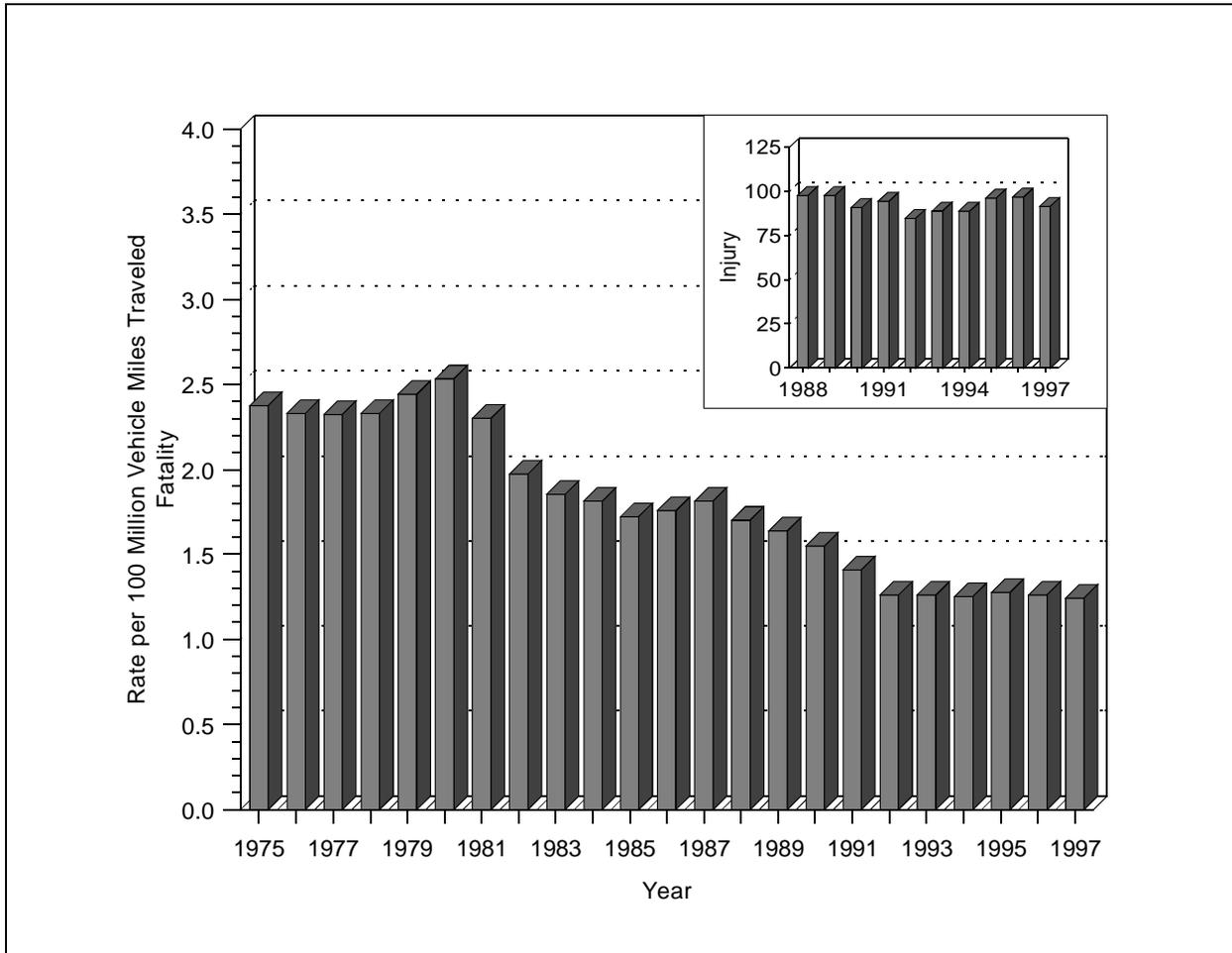


Table 9
Large Truck Occupants Killed or Injured and Fatality and Injury Rates
per Registered Vehicle and Vehicle Miles of Travel, 1975-1998

Year	Registered Large Trucks	Vehicle Miles Traveled (Millions)	Large Truck Occupants Killed	Fatality Rate per 100,000 Registered Large Trucks	Fatality Rate per 100 Million VMT	Large Truck Occupants Injured	Injury Rate per 100,000 Registered Large Trucks	Injury Rate per 100 Million VMT
1975	5,362,369	81,330	961	17.92	1.2	*	*	*
1976	5,575,185	86,070	1,132	20.30	1.3	*	*	*
1977	5,689,903	95,021	1,287	22.62	1.4	*	*	*
1978	5,859,807	105,739	1,395	23.81	1.3	*	*	*
1979	5,891,571	109,004	1,432	24.31	1.3	*	*	*
1980	5,790,653	108,491	1,262	21.79	1.2	*	*	*
1981	5,716,278	108,702	1,133	19.82	1.0	*	*	*
1982	5,590,415	111,423	944	16.89	0.8	*	*	*
1983	5,508,392	116,132	982	17.83	0.8	*	*	*
1984	5,401,075	121,796	1,074	19.88	0.9	*	*	*
1985	5,996,337	123,504	977	16.29	0.8	*	*	*
1986	5,720,880	126,675	926	16.19	0.7	*	*	*
1987	5,718,266	133,517	852	14.90	0.6	*	*	*
1988	6,136,884	137,985	911	14.84	0.7	37,000	611	27
1989	6,226,482	142,749	858	13.78	0.6	43,000	687	30
1990	6,195,876	146,242	705	11.38	0.5	42,000	675	29
1991	6,172,146	149,543	661	10.71	0.4	28,000	454	19
1992	6,045,205	153,384	585	9.68	0.4	34,000	559	22
1993	6,088,155	159,888	605	9.94	0.4	32,000	527	20
1994	6,587,885	170,216	670	10.17	0.4	30,000	459	18
1995	6,719,421	178,156	648	9.64	0.4	30,000	452	17
1996	7,012,615	182,971	621	8.86	0.3	33,000	467	18
1997	7,083,326	191,345	723	10.21	0.4	31,000	436	16
1998	NA	NA	728	--	--	29,000	--	--

* Injury data not available before 1988.

NA = not available.

Source: Registered Vehicles and Vehicle Miles Traveled—Federal Highway Administration.

Figure 6
Large Truck Occupant Fatality and Injury Rates
per 100 Million Vehicle Miles Traveled, 1975-1997

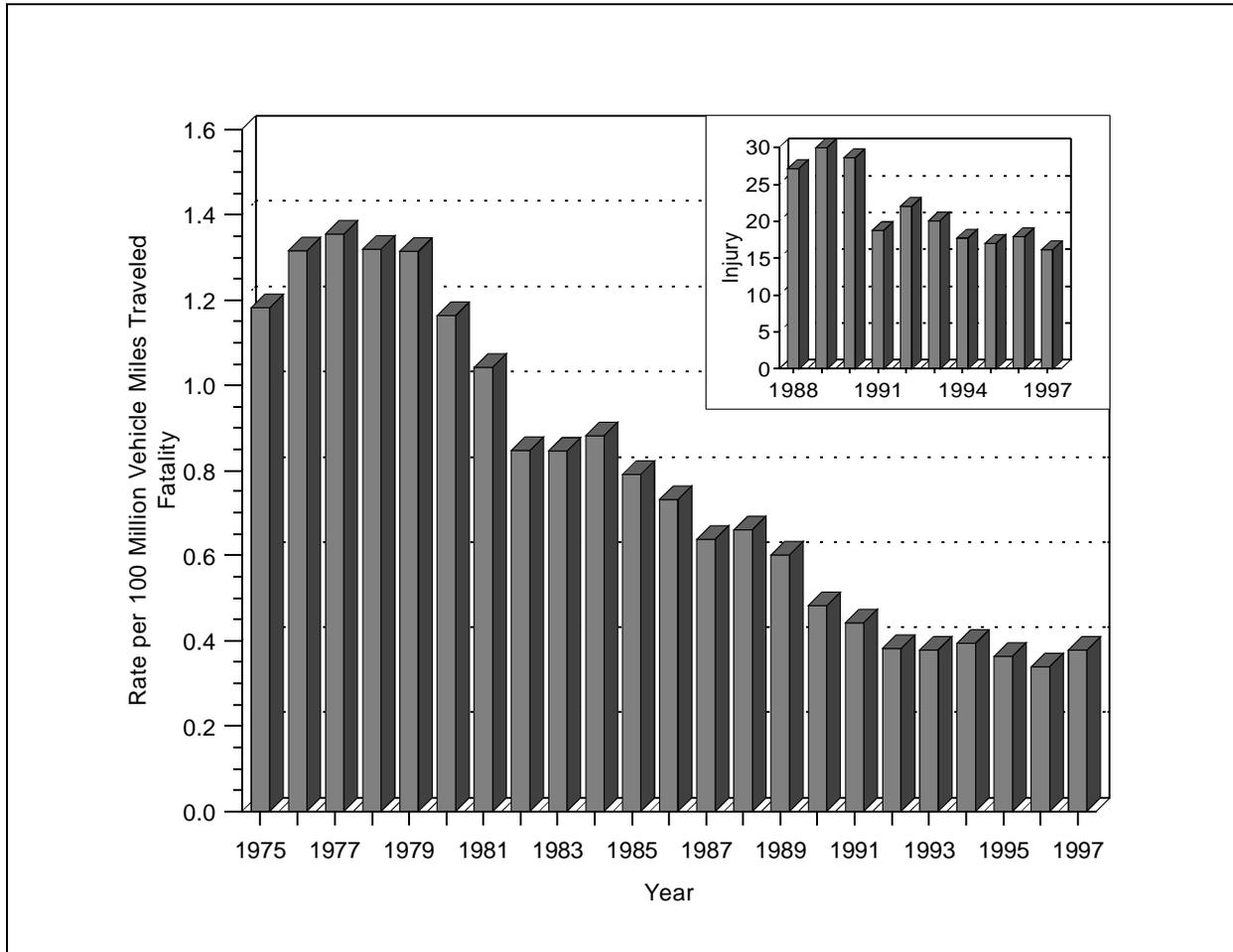


Table 10
Motorcycle Occupants Killed or Injured and Fatality and Injury Rates
per Registered Vehicle and Vehicle Miles of Travel, 1975-1998

Year	Registered Motorcycles	Vehicle Miles Traveled (Millions)	Motorcycle Occupants Killed	Fatality Rate per 100,000 Registered Motorcycles	Fatality Rate per 100 Million VMT	Motorcycle Occupants Injured	Injury Rate per 100,000 Registered Motorcycles	Injury Rate per 100 Million VMT
1975	4,964,070	5,629	3,189	64.24	56.7	*	*	*
1976	4,933,332	6,003	3,312	67.14	55.2	*	*	*
1977	4,933,256	6,349	4,104	83.19	64.6	*	*	*
1978	4,867,855	7,158	4,577	94.02	63.9	*	*	*
1979	5,422,132	8,637	4,894	90.26	56.7	*	*	*
1980	5,693,940	10,214	5,144	90.34	50.4	*	*	*
1981	5,831,132	10,690	4,906	84.13	45.9	*	*	*
1982	5,753,858	9,910	4,453	77.39	44.9	*	*	*
1983	5,585,112	8,760	4,265	76.36	48.7	*	*	*
1984	5,479,822	8,784	4,608	84.09	52.5	*	*	*
1985	5,444,404	9,086	4,564	83.83	50.2	*	*	*
1986	5,198,993	9,397	4,566	87.82	48.6	*	*	*
1987	4,885,772	9,506	4,036	82.61	42.5	*	*	*
1988	4,584,284	10,024	3,662	79.88	36.5	105,000	2,294	1,049
1989	4,420,420	10,371	3,141	71.06	30.3	83,000	1,887	805
1990	4,259,462	9,557	3,244	76.16	33.9	84,000	1,979	882
1991	4,177,365	9,178	2,806	67.17	30.6	80,000	1,925	876
1992	4,065,118	9,557	2,395	58.92	25.1	65,000	1,601	681
1993	3,977,856	9,906	2,449	61.57	24.7	59,000	1,494	600
1994	3,756,555	10,240	2,320	61.76	22.7	57,000	1,528	561
1995	3,897,191	9,797	2,227	57.14	22.7	57,000	1,475	587
1996	3,871,599	9,920	2,161	55.82	21.8	55,000	1,428	557
1997	3,826,373	10,076	2,116	55.30	21.0	53,000	1,374	522
1998	NA	NA	2,284	--	--	49,000	--	--

* Injury data not available before 1988.

NA = not available.

Source: Registered Vehicles and Vehicle Miles Traveled—Federal Highway Administration.

Figure 7
Motorcycle Occupant Fatality and Injury Rates
per 100 Million Vehicle Miles Traveled, 1975-1997

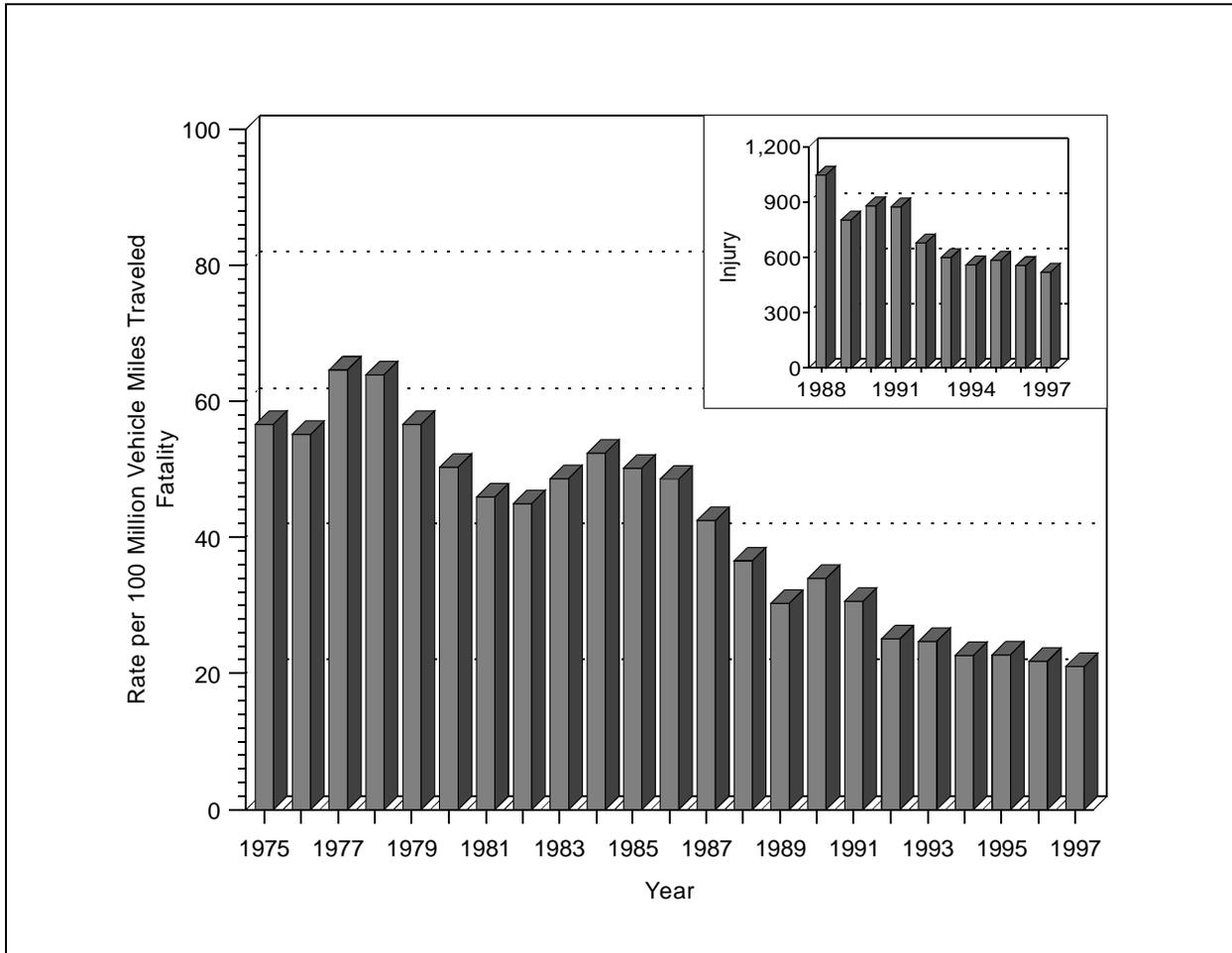


Table 11
Persons Killed or Injured in Crashes Involving a Large Truck,
by Person Type and Crash Type, 1975-1998

Year	Person Type					Total
	Truck Occupants by Crash Type			Other Vehicle Occupants	Nonmotorists	
	Single Vehicle	Multiple Vehicle	Total			
Killed						
1975	643	318	961	3,106	416	4,483
1976	774	358	1,132	3,384	492	5,008
1977	884	403	1,287	3,925	511	5,723
1978	929	466	1,395	4,354	607	6,356
1979	967	465	1,432	4,615	655	6,702
1980	861	401	1,262	4,084	625	5,971
1981	785	348	1,133	4,126	547	5,806
1982	639	305	944	3,790	495	5,229
1983	676	306	982	3,941	568	5,491
1984	755	319	1,074	4,036	530	5,640
1985	634	343	977	4,227	530	5,734
1986	603	323	926	4,088	565	5,579
1987	571	281	852	4,194	552	5,598
1988	585	326	911	4,250	518	5,679
1989	550	308	858	4,142	490	5,490
1990	485	220	705	4,071	496	5,272
1991	448	213	661	3,705	455	4,821
1992	396	189	585	3,460	417	4,462
1993	389	216	605	3,855	396	4,856
1994	451	219	670	4,013	461	5,144
1995	425	223	648	3,846	424	4,918
1996	412	209	621	4,087	434	5,142
1997	499	224	723	4,223	452	5,398
1998	481	247	728	4,212	434	5,374
Injured						
1988	17,000	20,000	37,000	89,000	4,000	130,000
1989	20,000	23,000	43,000	111,000	2,000	156,000
1990	16,000	26,000	42,000	106,000	2,000	150,000
1991	13,000	15,000	28,000	80,000	2,000	110,000
1992	13,000	20,000	34,000	102,000	3,000	139,000
1993	13,000	19,000	32,000	95,000	6,000	133,000
1994	11,000	19,000	30,000	99,000	3,000	133,000
1995	15,000	15,000	30,000	84,000	2,000	117,000
1996	15,000	18,000	33,000	95,000	3,000	130,000
1997	14,000	17,000	31,000	98,000	2,000	131,000
1998	14,000	14,000	29,000	97,000	2,000	127,000

Table 12
Nonmotorist Fatality and Injury Rates per Population by Age Group, 1975-1998

Year	Age Group (Years)											Total
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74	
Fatality Rate per 100,000 Population												
1975	3.64	5.99	3.89	3.79	2.98	2.39	2.75	3.17	3.66	6.05	10.76	3.99
1976	3.52	5.63	3.71	3.72	3.04	2.43	2.62	3.30	3.60	5.58	10.12	3.87
1977	2.99	5.35	3.68	3.98	3.18	2.68	2.66	3.20	4.05	5.80	10.57	3.97
1978	3.14	5.45	3.76	4.04	3.51	2.90	2.78	3.33	3.77	5.36	8.93	3.96
1979	2.87	5.16	3.68	4.51	4.01	3.14	2.99	3.34	3.68	5.50	9.17	4.08
1980	2.67	4.68	3.64	4.45	4.34	3.17	2.80	3.39	3.69	5.00	9.89	4.03
1981	2.14	4.44	3.27	4.20	4.18	3.36	2.82	3.22	3.42	4.88	8.74	3.87
1982	2.15	3.89	3.07	4.11	4.27	3.06	3.00	3.05	3.05	4.45	7.41	3.58
1983	2.03	3.69	3.05	3.67	3.83	2.91	2.46	2.80	3.12	3.77	7.37	3.31
1984	1.92	3.61	3.13	3.55	3.63	2.95	2.58	2.93	3.34	4.01	7.64	3.38
1985	2.05	3.67	3.01	3.31	3.38	2.71	2.65	2.69	3.36	3.90	7.35	3.27
1986	1.89	3.58	3.22	3.45	3.54	2.93	2.51	2.98	2.86	3.64	7.34	3.27
1987	1.66	3.63	3.24	3.12	3.39	2.83	2.69	2.88	3.14	3.79	7.20	3.23
1988	1.69	3.65	2.88	2.92	3.37	2.94	2.70	2.77	3.04	3.94	7.70	3.24
1989	1.54	3.06	2.53	2.58	2.90	3.00	2.73	2.61	3.18	3.49	7.10	3.04
1990	1.60	2.65	2.34	2.53	2.84	2.97	2.77	2.63	3.09	3.67	6.97	2.99
1991	1.43	2.40	2.39	2.45	2.86	2.65	2.36	2.44	2.67	3.08	5.93	2.68
1992	1.29	2.25	2.06	2.20	2.21	2.38	2.39	2.42	2.56	3.10	5.42	2.50
1993	1.35	2.19	2.23	2.06	2.25	2.63	2.51	2.25	2.52	2.95	5.47	2.55
1994	1.31	2.20	2.10	2.01	2.22	2.34	2.46	2.35	2.41	2.82	5.50	2.46
1995	1.12	2.02	2.08	2.02	2.38	2.41	2.60	2.38	2.50	2.98	5.21	2.48
1996	1.22	1.87	1.93	1.98	2.38	2.17	2.49	2.40	2.63	2.94	4.76	2.40
1997	0.97	1.73	1.83	2.11	2.15	2.23	2.47	2.39	2.53	2.99	4.56	2.35
1998	0.96	1.42	1.62	1.88	2.11	2.07	2.45	2.40	2.60	2.73	4.64	2.26
Injury Rate per 100,000 Population												
1988	35	178	195	116	117	74	45	38	35	25	45	79
1989	32	179	198	127	96	69	53	43	42	33	39	79
1990	34	139	181	128	109	76	52	37	26	29	38	75
1991	26	138	157	96	91	70	41	37	31	31	29	66
1992	33	120	165	93	98	57	45	35	29	30	27	63
1993	27	116	170	93	95	66	49	45	26	27	38	66
1994	24	112	151	119	88	60	47	36	33	24	29	63
1995	33	104	160	93	87	62	52	27	22	30	26	62
1996	31	91	156	87	80	57	38	36	26	26	22	57
1997	27	93	132	75	67	51	50	34	29	29	22	55
1998	19	77	121	70	69	49	40	33	25	21	17	48

Table 13
Persons Killed, by Highest Blood Alcohol Concentration (BAC) in the Crash, 1982-1998

Year	BAC = 0.00		BAC = 0.01-0.09		BAC = 0.10+		Total Number	Total Fatalities in Alcohol-Related Crashes	
	Number	Percent	Number	Percent	Number	Percent		Number	Percent
1982	18,780	43	4,809	11	20,356	46	43,945	25,165	57
1983	18,943	44	4,472	10	19,174	45	42,589	23,646	56
1984	20,499	46	4,766	11	18,992	43	44,257	23,758	54
1985	21,109	48	4,604	11	18,111	41	43,825	22,716	52
1986	22,042	48	5,109	11	18,936	41	46,087	24,045	52
1987	22,749	49	5,112	11	18,529	40	46,390	23,641	51
1988	23,461	50	4,895	10	18,731	40	47,087	23,626	50
1989	23,178	51	4,541	10	17,863	39	45,582	22,404	49
1990	22,515	50	4,434	10	17,650	40	44,599	22,084	50
1991	21,621	52	3,957	10	15,930	38	41,508	19,887	48
1992	21,392	55	3,625	9	14,234	36	39,250	17,858	45
1993	22,677	56	3,496	9	13,977	35	40,150	17,473	44
1994	24,136	59	3,480	9	13,100	32	40,716	16,580	41
1995	24,570	59	3,746	9	13,501	32	41,817	17,247	41
1996	24,847	59	3,774	9	13,444	32	42,065	17,218	41
1997	25,824	61	3,480	8	12,710	30	42,013	16,189	39
1998	25,536	62	3,479	8	12,456	30	41,471	15,935	38

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Figure 8
Proportion of Persons Killed, by Highest Blood Alcohol Concentration (BAC) in the Crash, 1982-1998

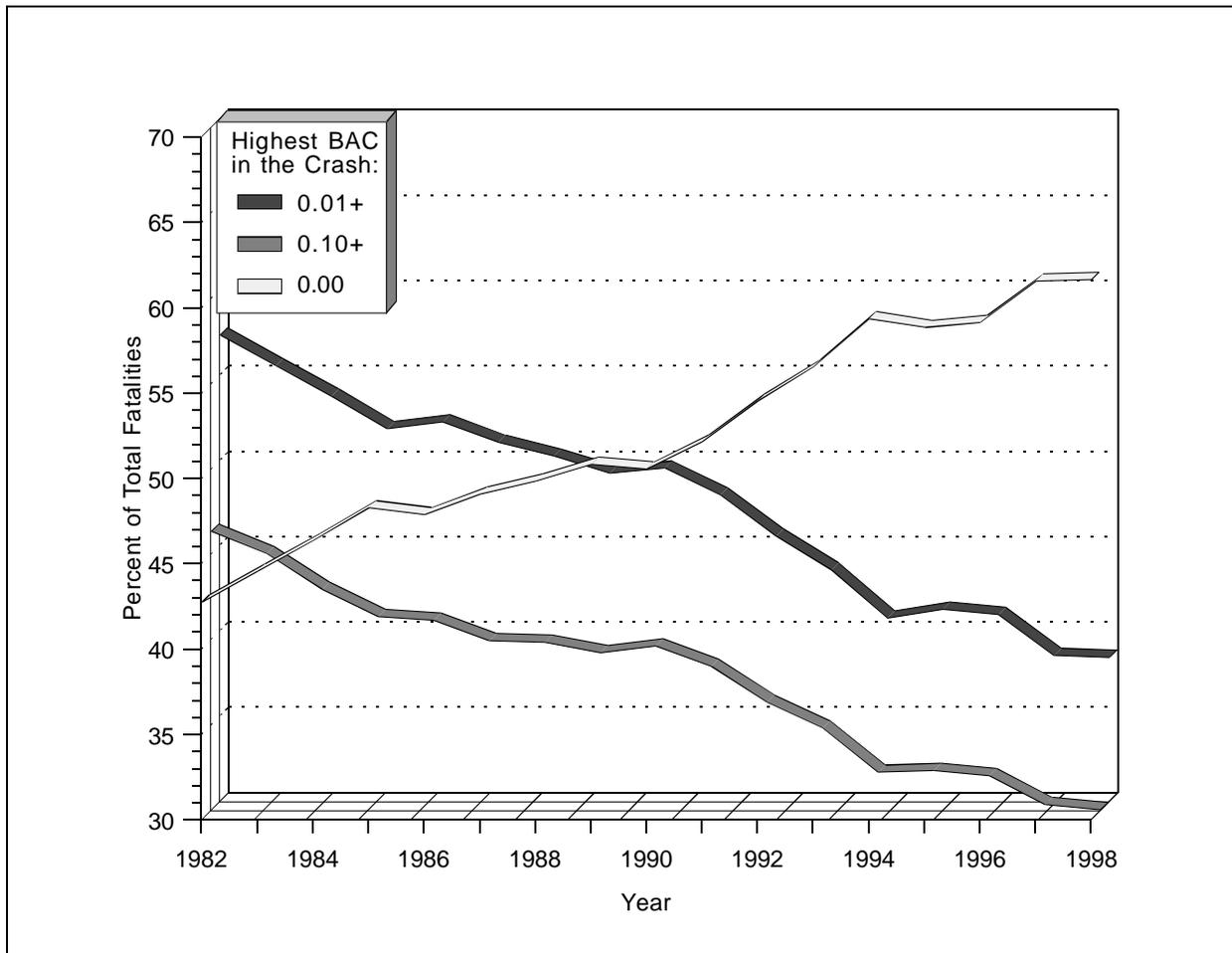


Table 14
Persons Killed During Holiday Periods, by Alcohol Involvement, 1982-1998

Year	Holiday Period*							
	New Year's Day		Memorial Day		Fourth of July			
	Killed	Percent Alcohol-Related**	Killed	Percent Alcohol-Related**	Killed	Percent Alcohol-Related**		
1982	***	***	498 (3)	68	600 (3)	70		
1983	375 (3)	69	539 (3)	63	620 (3)	68		
1984	346 (3)	69	527 (3)	67	223 (1)	65		
1985	496 (4)	60	557 (3)	62	689 (4)	63		
1986	223 (1)	66	616 (3)	63	611 (3)	68		
1987	535 (4)	61	519 (3)	61	556 (3)	60		
1988	407 (3)	63	531 (3)	62	631 (3)	63		
1989	443 (3)	55	594 (3)	58	749 (4)	60		
1990	421 (3)	57	589 (3)	62	268 (1)	65		
1991	441 (4)	60	533 (3)	61	718 (4)	57		
1992	164 (1)	74	438 (3)	57	535 (3)	56		
1993	370 (3)	58	454 (3)	52	525 (3)	54		
1994	372 (3)	55	482 (3)	48	519 (3)	49		
1995	392 (3)	48	483 (3)	52	661 (4)	49		
1996	420 (3)	52	514 (3)	52	629 (4)	47		
1997	192 (1)	67	511 (3)	47	508 (3)	50		
1998	545 (4)	51	393 (3)	52	478 (3)	50		
			Labor Day		Thanksgiving		Christmas	
1982	628 (3)	68	601 (4)	62	458 (3)	65		
1983	636 (3)	70	533 (4)	59	353 (3)	60		
1984	609 (3)	66	559 (4)	60	643 (4)	66		
1985	605 (3)	64	566 (4)	57	152 (1)	66		
1986	663 (3)	64	598 (4)	59	508 (4)	59		
1987	630 (3)	63	659 (4)	56	409 (3)	57		
1988	592 (3)	64	601 (4)	58	511 (3)	60		
1989	589 (3)	60	561 (4)	57	553 (3)	61		
1990	599 (3)	66	563 (4)	54	567 (4)	51		
1991	577 (3)	56	546 (4)	52	135 (1)	50		
1992	460 (3)	55	403 (4)	57	410 (3)	50		
1993	522 (3)	58	570 (4)	47	402 (3)	54		
1994	494 (3)	55	575 (4)	47	455 (3)	49		
1995	511 (3)	49	527 (4)	52	358 (3)	47		
1996	525 (3)	52	588 (4)	46	167 (1)	54		
1997	507 (3)	50	571 (4)	40	480 (4)	44		
1998	464 (3)	50	598 (4)	48	364 (3)	48		

* The number of whole days in the holiday period is shown in parentheses. The length of the holiday period depends on the day on which the legal holiday falls, as follows:

- If the holiday falls on *Monday*, the holiday period is from 6:00 pm Friday to 5:59 am Tuesday.
- If the holiday falls on *Tuesday*, the holiday period is from 6:00 pm Friday to 5:59 am Wednesday.
- If the holiday falls on *Wednesday*, the holiday period is from 6:00 pm Tuesday to 5:59 am Thursday.
- If the holiday falls on *Thursday*, the holiday period is from 6:00 pm Wednesday to 5:59 am Monday.
- If the holiday falls on *Friday*, the holiday period is from 6:00 pm Thursday to 5:59 am Monday.

** Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

*** No data available.

Table 15
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Time of Day, 1982-1998

Year	Day*			Night*			Total Drivers		
	Total	Percent		Total	Percent		Total	Percent	
		BAC = 0.01+	BAC = 0.10+		BAC = 0.01+	BAC = 0.10+		BAC = 0.01+	BAC = 0.10+
1982	23,725	17	12	32,085	55	43	56,029	39	30
1983	24,381	17	12	30,037	54	43	54,656	38	29
1984	26,415	16	11	30,775	53	41	57,512	36	27
1985	27,578	15	10	30,008	51	40	57,883	34	26
1986	28,434	15	10	31,543	51	40	60,335	34	26
1987	29,227	14	10	31,854	50	38	61,442	33	25
1988	30,196	14	10	31,715	50	39	62,253	33	25
1989	29,953	14	9	30,170	49	39	60,435	32	24
1990	28,797	14	9	29,778	50	39	58,893	32	25
1991	26,829	13	9	27,249	49	38	54,391	31	24
1992	26,236	12	8	25,380	46	36	51,901	29	22
1993	27,770	11	7	25,355	45	36	53,401	27	21
1994	29,134	10	7	25,112	42	33	54,549	25	19
1995	30,066	11	7	25,755	42	33	56,164	25	19
1996	30,802	10	7	25,864	42	33	57,001	25	19
1997	30,979	9	6	25,368	40	32	56,688	24	18
1998	31,354	10	6	24,851	40	31	56,543	23	18

* Day = 6:00 AM - 5:59 PM. Night = 6:00 PM - 5:59 AM. Total includes drivers with time of day unknown.
 Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 16
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Sex, 1982-1998

Year	Male			Female		
	Total	Percent		Total	Percent	
		BAC = 0.01+	BAC = 0.10+		BAC = 0.01+	BAC = 0.10+
1982	44,370	42	32	10,675	26	19
1983	42,812	40	31	10,958	25	18
1984	44,723	39	30	11,907	24	17
1985	44,846	37	28	12,142	22	15
1986	46,653	38	29	12,744	21	15
1987	46,884	36	28	13,614	21	15
1988	47,402	36	28	13,951	20	15
1989	45,448	35	27	14,054	20	14
1990	44,281	36	28	13,726	19	14
1991	40,731	35	27	12,825	19	14
1992	38,598	32	25	12,596	18	13
1993	39,556	31	24	13,082	17	12
1994	40,233	29	22	13,567	15	11
1995	41,235	28	22	14,184	16	11
1996	41,376	28	21	14,850	16	11
1997	40,954	27	20	14,954	14	10
1998	40,746	26	20	15,061	14	10

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 17
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Vehicle Type, 1982-1998

Year	Passenger Car			Light Truck			Large Truck			Motorcycle		
	Total	Percent		Total	Percent		Total	Percent		Total	Percent	
		BAC= 0.01+	BAC= 0.10+		BAC= 0.01+	BAC= 0.10+		BAC= 0.01+	BAC= 0.10+		BAC= 0.01+	BAC= 0.10+
1982	34,121	40	31	11,199	43	35	4,582	8	4	4,490	53	41
1983	33,069	39	30	11,017	42	33	4,790	8	5	4,288	54	41
1984	34,395	36	28	11,866	39	31	5,056	8	4	4,650	54	40
1985	34,071	35	26	12,372	36	29	5,091	6	4	4,598	53	39
1986	35,959	35	26	13,208	37	29	5,015	5	3	4,558	54	41
1987	36,371	34	25	14,407	37	29	5,046	4	3	4,061	51	38
1988	36,769	33	25	15,167	37	29	5,141	5	3	3,704	50	36
1989	35,204	32	24	15,579	35	28	4,903	5	3	3,182	53	40
1990	33,893	32	24	15,501	36	29	4,709	5	2	3,269	52	39
1991	31,102	31	23	14,702	36	28	4,291	4	2	2,816	51	39
1992	29,670	29	22	14,540	33	26	3,980	3	1	2,435	48	36
1993	30,060	27	21	15,207	31	25	4,271	3	2	2,471	44	33
1994	30,103	26	19	16,235	29	23	4,592	3	1	2,330	40	29
1995	30,773	26	19	17,483	28	22	4,410	3	1	2,262	41	29
1996	30,595	26	19	18,118	28	22	4,703	3	1	2,175	42	30
1997	29,896	24	18	18,502	26	20	4,859	2	1	2,159	39	28
1998	28,857	24	18	19,104	26	20	4,883	2	1	2,323	40	31

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Figure 9
Proportion of Drivers Involved in Fatal Crashes with BAC = 0.10+ by Vehicle Type, 1982-1998

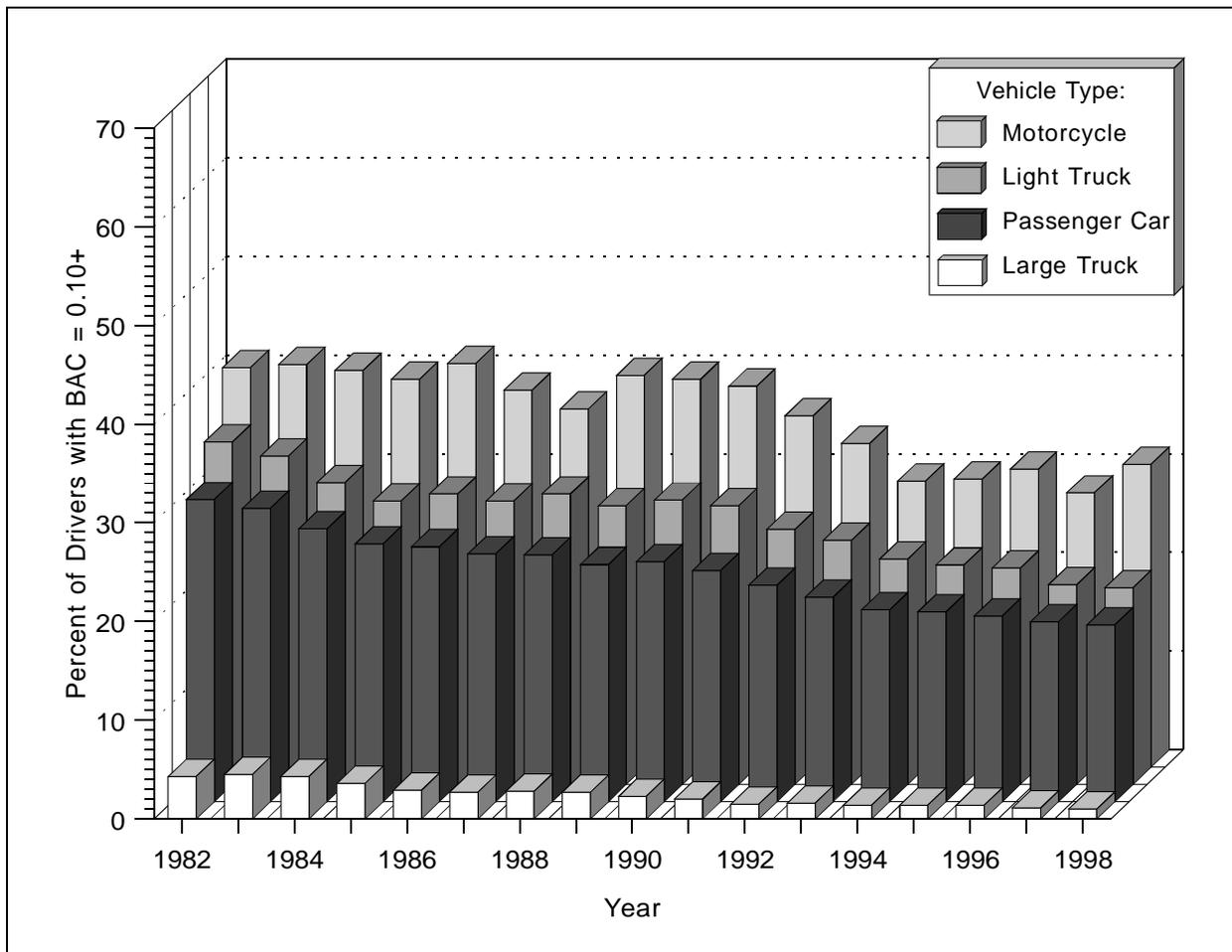


Table 18
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Age, 1982-1998

Year	Age								
	<16 Years			16-20 Years			21-24 Years		
	Total	Percent		Total	Percent		Total	Percent	
		BAC = 0.01+	BAC = 0.10+		BAC = 0.01+	BAC = 0.10+		BAC = 0.01+	BAC = 0.10+
1982	412	13	8	9,858	44	31	9,018	52	40
1983	416	12	7	9,334	42	30	8,432	51	39
1984	446	15	8	9,804	40	27	8,963	49	37
1985	479	15	9	9,386	35	24	9,046	46	35
1986	504	15	8	10,163	36	24	9,129	47	36
1987	469	16	8	9,910	33	21	8,808	45	34
1988	448	14	6	10,171	32	21	8,555	46	35
1989	402	11	6	9,442	30	20	7,723	45	35
1990	409	12	6	8,821	32	21	7,195	45	35
1991	364	14	5	8,002	30	20	6,748	44	34
1992	350	12	4	7,192	27	18	6,323	41	31
1993	383	10	4	7,256	25	16	6,406	39	31
1994	397	10	7	7,723	23	14	6,291	37	28
1995	410	10	4	7,725	21	13	6,263	37	28
1996	413	9	3	7,824	21	14	6,205	37	27
1997	345	6	3	7,719	22	14	5,705	35	26
1998	361	9	5	7,755	22	14	5,599	36	28
	25-34 Years			35-44 Years			45-54 Years		
1982	14,787	44	35	7,984	35	28	4,980	29	23
1983	14,470	44	35	8,068	34	28	4,992	27	21
1984	15,233	42	33	8,563	32	26	5,084	25	20
1985	15,257	41	32	8,892	30	24	5,150	24	19
1986	16,179	41	33	9,240	31	25	5,077	24	18
1987	16,562	42	33	9,778	31	25	5,470	22	17
1988	16,398	41	33	10,077	31	25	5,761	23	18
1989	15,928	40	32	10,106	31	25	6,038	24	19
1990	15,764	41	33	10,177	32	26	5,867	23	18
1991	14,151	40	32	9,482	31	25	5,458	23	18
1992	13,049	38	31	9,284	30	24	5,672	21	16
1993	13,038	36	29	9,738	29	23	5,970	20	16
1994	12,891	34	27	9,951	27	22	6,493	20	15
1995	13,048	34	27	10,677	29	23	6,815	20	15
1996	12,889	33	26	10,955	28	22	7,127	20	15
1997	12,453	31	24	10,904	27	22	7,522	19	15
1998	11,895	31	24	11,220	26	21	7,680	20	15
	55-64 Years			65-74 Years			>74 Years		
1982	3,941	23	17	2,343	17	13	1,551	9	6
1983	3,862	22	17	2,434	14	10	1,592	9	6
1984	4,059	20	15	2,620	15	11	1,696	8	5
1985	4,112	19	14	2,650	14	10	1,829	7	4
1986	4,019	19	14	2,844	14	9	2,037	6	3
1987	4,223	18	14	2,987	13	9	2,091	6	4
1988	4,320	18	14	3,079	14	9	2,297	7	4
1989	4,202	18	14	3,107	12	9	2,324	7	4
1990	4,068	17	13	3,161	12	8	2,340	7	4
1991	3,695	16	12	3,017	12	8	2,454	6	3
1992	3,688	16	11	3,024	12	8	2,450	5	3
1993	3,824	16	12	3,031	10	7	2,817	6	3
1994	3,828	14	11	3,194	11	8	2,867	5	3
1995	4,079	16	12	3,251	10	7	2,989	5	3
1996	4,237	14	11	3,319	11	7	3,068	5	3
1997	4,394	13	10	3,401	10	7	3,314	5	3
1998	4,471	13	9	3,395	9	6	3,285	5	3

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Figure 10
Proportion of Drivers in Fatal Crashes with BAC = 0.10+ by Age, 1982-1998

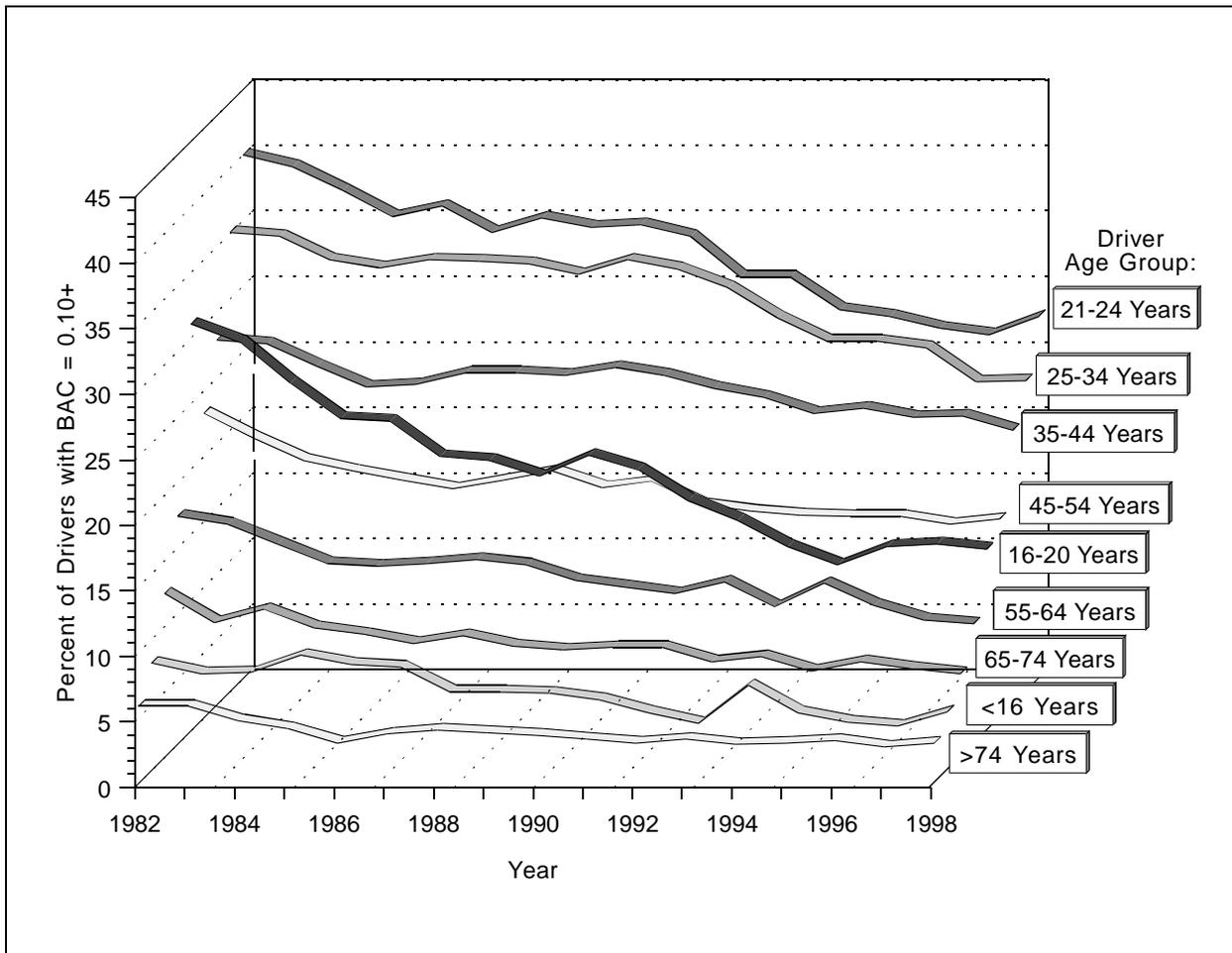


Table 19
Drivers in Fatal Crashes by Blood Alcohol Concentration (BAC) and Survival Status, 1982-1998

Year	Driver Survival Status								All Drivers in Fatal Crashes			
	Surviving Drivers				Killed Drivers							
	BAC = 0.00	BAC = 0.01-0.09	BAC = 0.10+	Total	BAC = 0.00	BAC = 0.01-0.09	BAC = 0.10+	Total	BAC = 0.00	BAC = 0.01-0.09	BAC = 0.10+	Total
1982	22,674	2,698	5,967	31,339	11,576	2,289	10,825	24,690	34,250	4,987	16,793	56,029
1983	22,426	2,512	5,581	30,518	11,720	2,165	10,253	24,138	34,145	4,677	15,834	54,656
1984	23,888	2,587	5,448	31,923	12,943	2,365	10,281	25,589	36,831	4,952	15,729	57,512
1985	25,106	2,350	5,089	32,546	13,215	2,317	9,805	25,337	38,321	4,668	14,894	57,883
1986	25,835	2,626	5,244	33,705	13,798	2,514	10,317	26,630	39,633	5,140	15,560	60,335
1987	26,727	2,657	5,224	34,609	14,322	2,403	10,108	26,833	41,049	5,060	15,332	61,442
1988	27,306	2,562	5,132	35,000	14,507	2,395	10,351	27,253	41,813	4,957	15,483	62,253
1989	26,903	2,317	4,826	34,046	14,367	2,194	9,828	26,389	41,271	4,511	14,654	60,435
1990	26,054	2,329	4,761	33,143	13,924	2,050	9,776	25,750	39,978	4,378	14,537	58,893
1991	24,172	2,060	4,229	30,461	13,328	1,852	8,749	23,930	37,500	3,913	12,978	54,391
1992	23,762	1,827	3,728	29,317	13,158	1,697	7,729	22,584	36,919	3,524	11,457	51,901
1993	24,874	1,753	3,632	30,259	13,944	1,616	7,582	23,142	38,818	3,369	11,214	53,401
1994	25,916	1,710	3,233	30,858	14,826	1,580	7,285	23,691	40,741	3,290	10,518	54,549
1995	26,753	1,745	3,277	31,774	15,143	1,722	7,525	24,390	41,895	3,467	10,802	56,164
1996	27,326	1,829	3,313	32,467	15,443	1,716	7,375	24,534	42,768	3,545	10,688	57,001
1997	27,266	1,693	3,062	32,021	16,042	1,605	7,021	24,667	43,308	3,297	10,083	56,688
1998	27,192	1,691	2,931	31,814	16,166	1,553	7,010	24,729	43,358	3,244	9,942	56,543

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 20
Pedestrians Killed, 14 Years and Older, by Blood Alcohol Concentration (BAC), 1982-1998

Year	BAC = 0.00		BAC = 0.01-0.09		BAC = 0.10+		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1982	3,266	53	482	8	2,406	39	6,154	100
1983	3,049	53	455	8	2,206	39	5,710	100
1984	3,234	55	430	7	2,242	38	5,907	100
1985	3,120	55	478	8	2,104	37	5,702	100
1986	3,171	56	465	8	2,066	36	5,702	100
1987	3,226	56	462	8	2,027	35	5,715	100
1988	3,372	58	426	7	2,026	35	5,825	100
1989	3,176	56	449	8	2,033	36	5,658	100
1990	3,204	57	385	7	2,006	36	5,595	100
1991	2,872	57	333	7	1,800	36	5,005	100
1992	2,734	57	335	7	1,743	36	4,812	100
1993	2,819	58	309	6	1,732	36	4,860	100
1994	2,791	59	350	7	1,595	34	4,737	100
1995	2,895	59	331	7	1,670	34	4,896	100
1996	2,762	58	324	7	1,691	35	4,777	100
1997	2,935	62	269	6	1,511	32	4,715	100
1998	2,793	60	323	7	1,551	33	4,668	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 21
Drivers of Passenger Cars and Light Trucks in Crashes by Crash Severity
and Restraint Use, 1975-1998

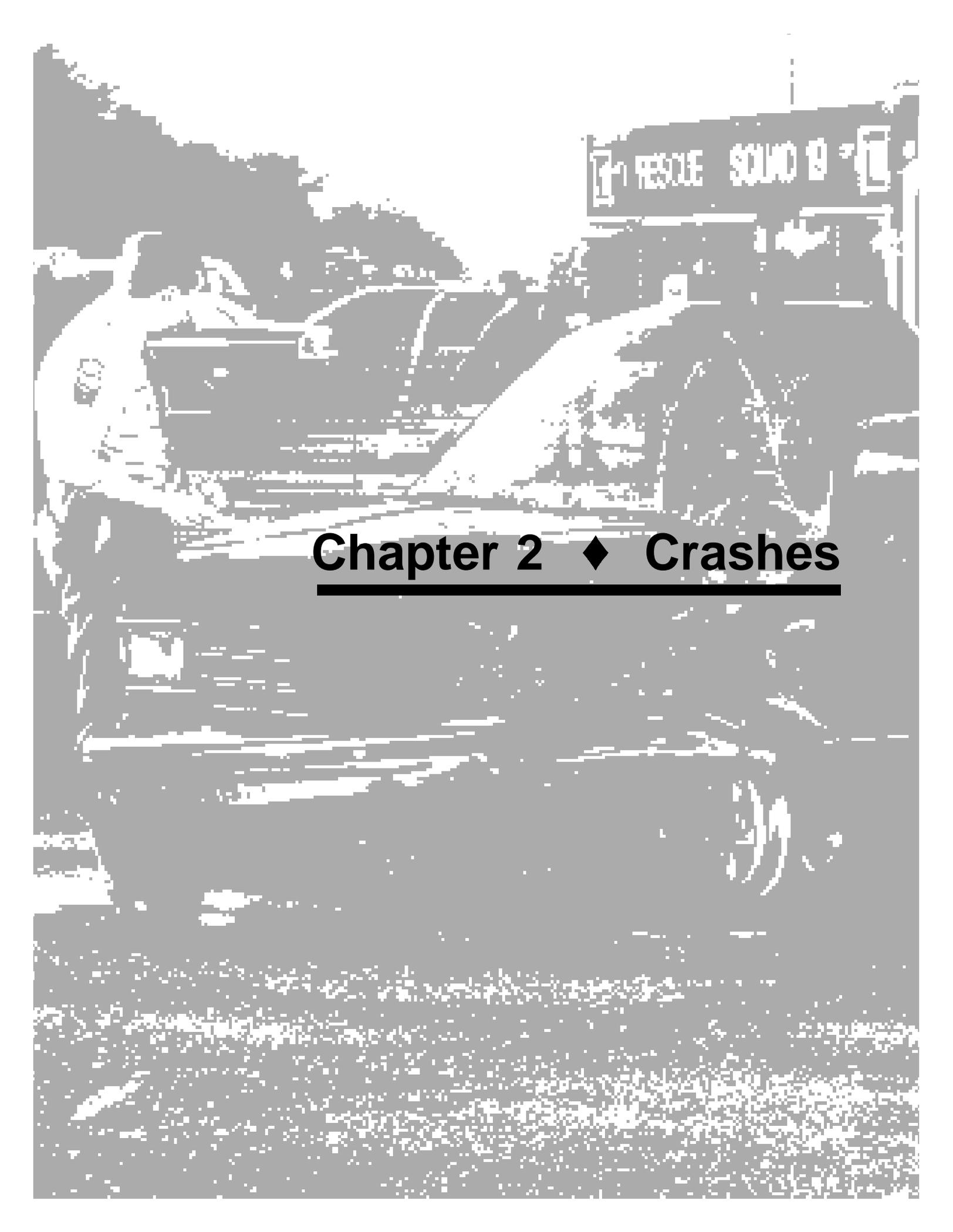
Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Drivers in Fatal Crashes								
1975	2,583	5.6	29,710	64.3	13,931	30.1	46,224	100.0
1976	2,062	4.5	29,905	64.7	14,239	30.8	46,206	100.0
1977	1,897	3.9	33,011	67.3	14,154	28.8	49,062	100.0
1978	1,882	3.6	37,606	72.3	12,510	24.1	51,998	100.0
1979	1,680	3.2	38,326	73.5	12,123	23.3	52,129	100.0
1980	1,482	2.9	37,889	73.8	11,935	23.3	51,306	100.0
1981	1,488	2.9	38,353	75.6	10,905	21.5	50,746	100.0
1982	1,515	3.3	33,793	74.6	10,012	22.1	45,320	100.0
1983	1,835	4.2	32,332	73.3	9,919	22.5	44,086	100.0
1984	2,756	6.0	32,979	71.3	10,526	22.8	46,261	100.0
1985	6,172	13.3	29,705	64.0	10,566	22.8	46,443	100.0
1986	10,891	22.2	28,778	58.5	9,498	19.3	49,167	100.0
1987	14,474	28.5	28,154	55.4	8,150	16.1	50,778	100.0
1988	16,948	32.6	28,146	54.2	6,842	13.2	51,936	100.0
1989	17,545	34.5	26,764	52.7	6,474	12.7	50,783	100.0
1990	18,340	37.1	24,706	50.0	6,348	12.9	49,394	100.0
1991	18,457	40.3	21,843	47.7	5,504	12.0	45,804	100.0
1992	19,106	43.2	19,836	44.9	5,268	11.9	44,210	100.0
1993	20,932	46.2	19,139	42.3	5,196	11.5	45,267	100.0
1994	22,763	49.1	18,946	40.9	4,629	10.0	46,338	100.0
1995	24,165	50.1	19,428	40.3	4,663	9.7	48,256	100.0
1996	25,207	51.7	18,759	38.5	4,747	9.7	48,713	100.0
1997	25,313	52.3	18,286	37.8	4,799	9.9	48,398	100.0
1998	25,728	53.6	17,539	36.6	4,694	9.8	47,961	100.0
Drivers in Injury Crashes								
1988	2,313,000	62.1	802,000	21.5	609,000	16.4	3,724,000	100.0
1989	2,267,000	62.8	749,000	20.8	592,000	16.4	3,607,000	100.0
1990	2,290,000	64.4	703,000	19.8	563,000	15.8	3,556,000	100.0
1991	2,308,000	68.0	581,000	17.1	505,000	14.9	3,394,000	100.0
1992	2,420,000	71.5	476,000	14.0	490,000	14.5	3,386,000	100.0
1993	2,557,000	73.8	435,000	12.6	475,000	13.7	3,467,000	100.0
1994	2,856,000	77.4	418,000	11.3	416,000	11.3	3,690,000	100.0
1995	3,118,000	79.3	388,000	9.9	425,000	10.8	3,931,000	100.0
1996	3,136,000	79.4	366,000	9.3	445,000	11.3	3,947,000	100.0
1997	3,003,000	79.1	339,000	8.9	452,000	11.9	3,794,000	100.0
1998	2,863,000	79.5	309,000	8.6	428,000	11.9	3,600,000	100.0
Drivers in Property-Damage-Only Crashes								
1988	4,517,000	60.4	1,200,000	16.0	1,763,000	23.6	7,481,000	100.0
1989	4,531,000	62.6	1,015,000	14.0	1,691,000	23.4	7,237,000	100.0
1990	4,499,000	63.4	978,000	13.8	1,616,000	22.8	7,094,000	100.0
1991	4,516,000	67.2	712,000	10.6	1,490,000	22.2	6,718,000	100.0
1992	4,671,000	71.6	508,000	7.8	1,344,000	20.6	6,523,000	100.0
1993	4,986,000	75.0	451,000	6.8	1,209,000	18.2	6,646,000	100.0
1994	5,534,000	77.7	392,000	5.5	1,198,000	16.8	7,124,000	100.0
1995	5,914,000	79.3	356,000	4.8	1,184,000	15.9	7,454,000	100.0
1996	5,960,000	79.2	328,000	4.4	1,241,000	16.5	7,529,000	100.0
1997	5,841,000	78.9	311,000	4.2	1,255,000	16.9	7,406,000	100.0
1998	5,720,000	79.6	268,000	3.7	1,199,000	16.7	7,187,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

Table 22
Occupants of Passenger Cars and Light Trucks Killed and Injured, by Restraint Use, 1975-1998

Year	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed								
1975	986	3.2	21,076	68.5	8,723	28.3	30,785	100.0
1976	796	2.5	21,979	69.5	8,829	27.9	31,604	100.0
1977	778	2.4	23,593	72.0	8,387	25.6	32,758	100.0
1978	784	2.2	26,671	76.4	7,443	21.3	34,898	100.0
1979	683	2.0	27,130	77.5	7,173	20.5	34,986	100.0
1980	671	1.9	27,483	78.7	6,781	19.4	34,935	100.0
1981	649	1.9	26,974	80.0	6,103	18.1	33,726	100.0
1982	679	2.3	23,558	79.3	5,452	18.4	29,689	100.0
1983	827	2.8	23,080	79.1	5,274	18.1	29,181	100.0
1984	1,208	4.0	23,299	77.4	5,609	18.6	30,116	100.0
1985	2,391	8.0	22,131	74.0	5,379	18.0	29,901	100.0
1986	4,074	12.6	23,420	72.6	4,767	14.8	32,261	100.0
1987	5,249	15.8	23,799	71.7	4,142	12.5	33,190	100.0
1988	6,210	18.2	24,359	71.4	3,545	10.4	34,114	100.0
1989	6,546	19.5	23,613	70.2	3,455	10.3	33,614	100.0
1990	6,775	20.7	22,547	69.0	3,371	10.3	32,693	100.0
1991	7,332	23.8	20,488	66.6	2,956	9.6	30,776	100.0
1992	7,699	26.1	19,053	64.6	2,733	9.3	29,485	100.0
1993	8,679	28.9	18,553	61.7	2,845	9.5	30,077	100.0
1994	9,620	31.1	18,658	60.4	2,623	8.5	30,901	100.0
1995	10,115	31.6	19,167	59.9	2,709	8.5	31,991	100.0
1996	10,683	32.9	18,881	58.2	2,873	8.9	32,437	100.0
1997	10,961	33.8	18,676	57.6	2,811	8.7	32,448	100.0
1998	11,139	35.0	18,000	56.6	2,672	8.4	31,811	100.0
Occupants Injured								
1988	1,752,000	57.2	912,000	29.8	399,000	13.0	3,063,000	100.0
1989	1,720,000	58.5	863,000	29.4	359,000	12.2	2,942,000	100.0
1990	1,737,000	60.3	820,000	28.4	325,000	11.3	2,882,000	100.0
1991	1,785,000	63.8	725,000	25.9	287,000	10.3	2,797,000	100.0
1992	1,854,000	66.8	622,000	22.4	300,000	10.8	2,776,000	100.0
1993	1,983,000	69.2	589,000	20.6	294,000	10.2	2,866,000	100.0
1994	2,208,000	73.7	564,000	18.8	223,000	7.4	2,995,000	100.0
1995	2,415,000	75.7	549,000	17.2	227,000	7.1	3,192,000	100.0
1996	2,468,000	76.7	520,000	16.1	231,000	7.2	3,220,000	100.0
1997	2,369,000	76.5	475,000	15.3	251,000	8.1	3,095,000	100.0
1998	2,297,000	77.5	437,000	14.7	230,000	7.8	2,964,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

A photograph of a fire truck with "FIRE RESCUE SQUAD 19" on its side, with firefighters working on a damaged car at an accident scene. The scene is outdoors on a paved area, possibly a parking lot or street. The fire truck is a large, dark-colored vehicle with emergency lights on top. A firefighter in a white uniform is leaning over the hood of a dark-colored car that has been crushed. Another firefighter is visible in the background. The text "Chapter 2 ♦ Crashes" is overlaid on the image in a bold, black font, underlined.

Chapter 2 ♦ Crashes



2. CRASHES

This chapter presents statistics about motor vehicle crashes according to the most severe injury in the crash: **Fatal**, **Nonfatal Injury** (Injury), and **Property Damage**. The tables and figures are presented in four groups: Time, Location, Circumstances, and Alcohol. Below are some of the crash statistics you will find in this section:

- More than 6.3 million police-reported motor vehicle crashes occurred in the United States in 1998. Almost one-third of these crashes resulted in an injury, with less than 1 percent of total crashes (37,081) resulting in a death.
- Midnight to 3 a.m. on Saturdays and Sundays proved to be the deadliest 3-hour periods throughout 1998, with 1,218 and 1,208 fatal crashes, respectively.
- Fifty-six percent of fatal crashes involved only one vehicle, compared to 28 percent of both injury crashes and property-damage-only crashes.
- More than half of fatal crashes occurred on roads with posted speed limits of 55 mph or more, while only 23 percent of property-damage-only crashes occurred on these roads.
- Collision with another motor vehicle in transport was the most common first harmful event for fatal, injury, and property-damage-only crashes. Collisions with fixed objects and noncollisions accounted for only 17 percent of all crashes, but they accounted for 40 percent of fatal crashes.
- Thirty-nine percent of fatal crashes involved alcohol. For fatal crashes occurring from midnight to 3 a.m., 76 percent involved alcohol.

Table 23
Crashes and Crash Rates by Month and Crash Severity

Month	Crash Severity						Total Crashes	
	Fatal		Injury		Property Damage Only			
	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
January	2,762	1.4	159,000	80	370,000	187	532,000	269
February	2,520	1.3	150,000	80	318,000	170	470,000	252
March	2,708	1.3	169,000	80	361,000	171	533,000	252
April	2,766	1.3	174,000	80	321,000	147	498,000	228
May	3,111	1.4	178,000	77	349,000	152	530,000	231
June	3,150	1.4	169,000	75	348,000	153	521,000	229
July	3,459	1.4	167,000	69	339,000	139	510,000	209
August	3,557	1.5	171,000	72	336,000	142	511,000	216
September	3,239	1.5	171,000	78	334,000	152	508,000	231
October	3,344	1.5	182,000	81	386,000	171	571,000	253
November	3,162	1.5	167,000	80	378,000	181	548,000	262
December	3,303	1.6	173,000	81	426,000	200	602,000	283
Total	37,081	1.4	2,029,000	77	4,269,000	163	6,335,000	242

* Crashes per 100 million vehicle miles traveled.
 Source: Vehicle miles traveled, Federal Highway Administration.

Table 24
Crashes by Time of Day, Day of Week, and Crash Severity

Time of Day	Day of Week							Total
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Fatal Crashes								
Midnight to 3 am	1,208	400	322	380	506	530	1,218	4,564
3 am to 6 am	641	269	256	267	332	329	630	2,724
6 am to 9 am	382	569	554	560	518	503	494	3,580
9 am to Noon	479	543	560	526	494	558	611	3,771
Noon to 3 pm	645	719	681	705	701	803	716	4,970
3 pm to 6 pm	885	840	887	822	894	1,015	869	6,213
6 pm to 9 pm	848	685	721	710	821	984	1,028	5,797
9 pm to Midnight	581	561	575	593	678	1,099	1,047	5,135
Unknown	65	22	39	30	41	43	73	327
Total*	5,734	4,608	4,595	4,593	4,985	5,864	6,686	37,081
Injury Crashes								
Midnight to 3 am	24,000	9,000	8,000	8,000	12,000	11,000	23,000	96,000
3 am to 6 am	13,000	7,000	7,000	6,000	7,000	9,000	15,000	64,000
6 am to 9 am	9,000	37,000	45,000	46,000	39,000	35,000	19,000	228,000
9 am to Noon	23,000	40,000	40,000	38,000	36,000	41,000	43,000	262,000
Noon to 3 pm	46,000	54,000	53,000	57,000	57,000	71,000	57,000	395,000
3 pm to 6 pm	43,000	81,000	82,000	83,000	78,000	91,000	52,000	510,000
6 pm to 9 pm	33,000	44,000	45,000	42,000	41,000	50,000	42,000	297,000
9 pm to Midnight	21,000	21,000	20,000	24,000	25,000	35,000	31,000	176,000
Total	212,000	293,000	301,000	304,000	296,000	341,000	281,000	2,029,000
Property-Damage-Only Crashes								
Midnight to 3 am	42,000	20,000	17,000	16,000	18,000	24,000	40,000	178,000
3 am to 6 am	20,000	15,000	14,000	15,000	18,000	15,000	21,000	118,000
6 am to 9 am	26,000	96,000	100,000	101,000	97,000	91,000	40,000	551,000
9 am to Noon	45,000	84,000	91,000	91,000	89,000	89,000	79,000	569,000
Noon to 3 pm	76,000	119,000	124,000	121,000	125,000	158,000	115,000	838,000
3 pm to 6 pm	87,000	168,000	183,000	165,000	174,000	192,000	102,000	1,070,000
6 pm to 9 pm	73,000	81,000	91,000	96,000	86,000	99,000	85,000	612,000
9 pm to Midnight	41,000	35,000	40,000	42,000	46,000	68,000	60,000	333,000
Total	410,000	619,000	660,000	647,000	653,000	736,000	543,000	4,269,000
All Crashes								
Midnight to 3 am	67,000	30,000	25,000	25,000	31,000	36,000	64,000	279,000
3 am to 6 am	34,000	23,000	22,000	21,000	25,000	24,000	36,000	185,000
6 am to 9 am	35,000	134,000	146,000	147,000	136,000	126,000	60,000	783,000
9 am to Noon	68,000	125,000	132,000	130,000	126,000	131,000	123,000	835,000
Noon to 3 pm	123,000	174,000	178,000	179,000	183,000	229,000	172,000	1,238,000
3 pm to 6 pm	131,000	249,000	266,000	248,000	254,000	284,000	155,000	1,586,000
6 pm to 9 pm	107,000	126,000	137,000	139,000	128,000	150,000	128,000	915,000
9 pm to Midnight	63,000	57,000	60,000	67,000	71,000	104,000	93,000	514,000
Total	628,000	917,000	965,000	956,000	954,000	1,083,000	831,000	6,335,000

* Includes 16 fatal crashes that occurred on unknown days.

Figure 11
Average Fatal Crashes per Hour by Time of Day, Weekdays and Weekends

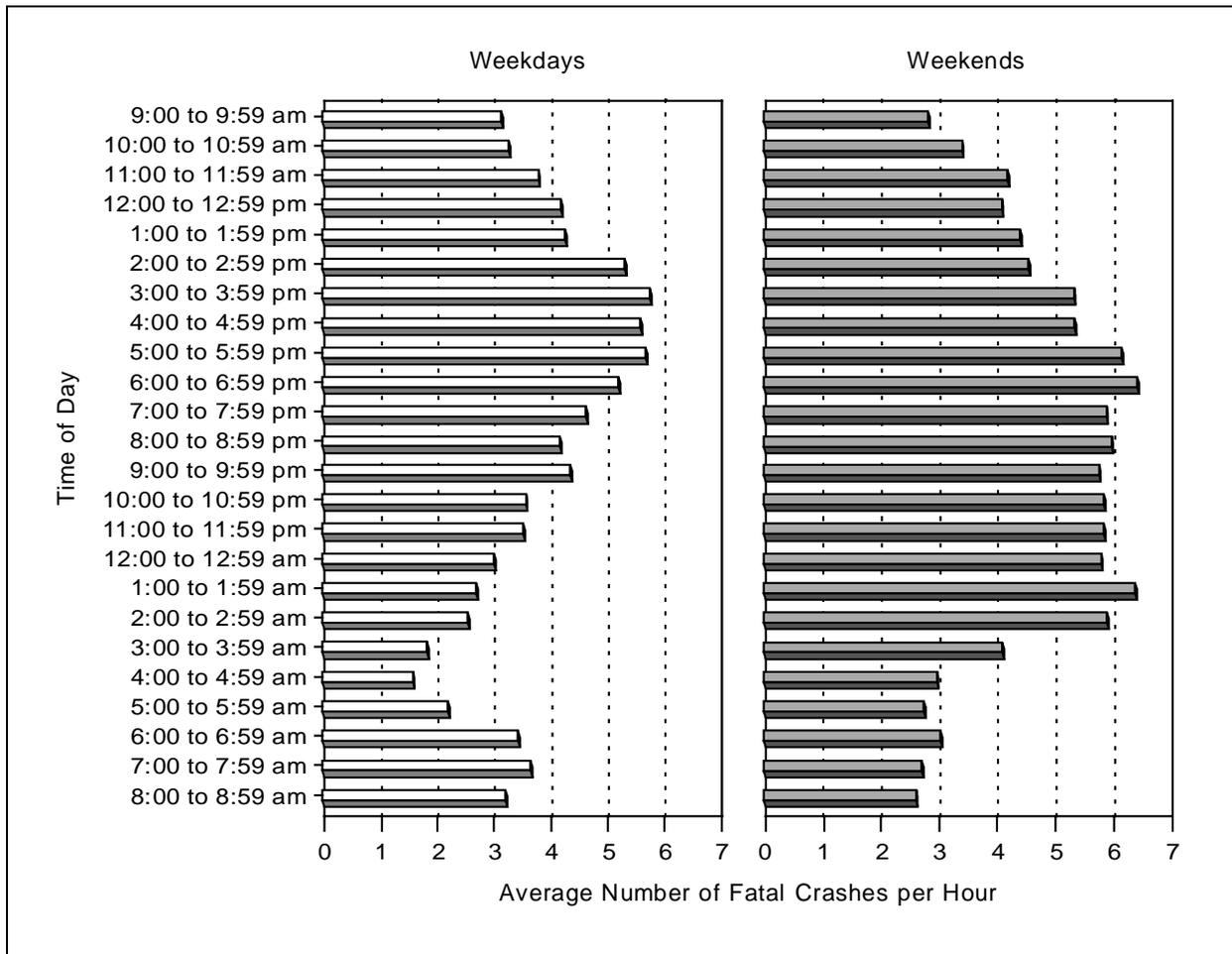


Table 25
Crashes by Weather Condition, Light Condition, and Crash Severity

Weather Condition	Light Condition				Total
	Daylight	Dark, but Lighted	Dark	Dawn or Dusk	
Fatal Crashes					
Normal	16,569	4,788	9,585	1,313	32,287
Rain	1,578	592	923	160	3,255
Snow/Sleet	299	49	218	43	611
Other	212	62	354	64	692
Unknown	46	12	39	1	236
Total*	18,704	5,503	11,119	1,581	37,081
Injury Crashes					
Normal	1,237,000	247,000	177,000	56,000	1,716,000
Rain	169,000	55,000	30,000	13,000	268,000
Snow/Sleet	15,000	5,000	7,000	3,000	30,000
Other	7,000	2,000	4,000	2,000	15,000
Total	1,429,000	310,000	217,000	73,000	2,029,000
Property-Damage-Only Crashes					
Normal	2,591,000	467,000	388,000	135,000	3,581,000
Rain	357,000	102,000	68,000	29,000	556,000
Snow/Sleet	58,000	19,000	19,000	5,000	101,000
Other	12,000	6,000	11,000	2,000	32,000
Total	3,018,000	594,000	486,000	171,000	4,269,000
All Crashes					
Normal	3,844,000	719,000	574,000	192,000	5,329,000
Rain	528,000	158,000	99,000	42,000	827,000
Snow/Sleet	74,000	24,000	25,000	8,000	131,000
Other	19,000	8,000	16,000	4,000	47,000
Total	4,465,000	909,000	714,000	246,000	6,335,000

* Includes 174 fatal crashes that occurred under unknown light conditions.

Table 26
Fatal Crashes by Emergency Medical Services (EMS) Response Times Within
Designated Minutes and by Land Use

Response Time (Minutes)	Time of Crash to EMS Notification		EMS Notification to EMS Arrival		EMS Arrival at Scene to Hospital Arrival		Time of Crash to Hospital Arrival	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Rural Fatal Crashes								
0 to 10	11,134	80.5	7,861	55.0	195	2.7	30	0.4
11 to 20	1,937	14.0	5,132	35.9	1,548	21.4	235	3.3
21 to 30	367	2.7	933	6.5	1,691	23.3	720	10.2
31 to 40	143	1.0	227	1.6	1,436	19.8	1,356	19.2
41 to 50	69	0.5	84	0.6	943	13.0	1,642	23.3
51 to 60	51	0.4	25	0.2	561	7.7	1,120	15.9
61 to 120	134	1.0	40	0.3	876	12.1	1,952	27.7
Total*	13,835	100.0	14,302	100.0	7,250	100.0	7,055	100.0
Urban Fatal Crashes								
0 to 10	7,484	93.3	6,988	88.3	278	6.6	62	1.5
11 to 20	367	4.6	795	10.0	1,423	33.5	627	14.8
21 to 30	73	0.9	92	1.2	1,298	30.6	1,244	29.3
31 to 40	35	0.4	27	0.3	665	15.7	1,040	24.5
41 to 50	11	0.1	5	0.1	292	6.9	648	15.3
51 to 60	17	0.2	4	0.1	135	3.2	281	6.6
61 to 120	33	0.4	6	0.1	151	3.6	347	8.2
Total*	8,020	100.0	7,917	100.0	4,242	100.0	4,249	100.0

* Includes crashes for which both times were known.

Table 27
Crashes by Crash Type, Relation to Roadway, and Crash Severity

Crash Type	Relation to Roadway					Total
	On Roadway	Off Roadway	Shoulder	Median	Other/Unknown	
Fatal Crashes						
Single Vehicle	6,656	11,301	1,694	936	310	20,897
Multiple Vehicle	15,515	276	218	136	39	16,184
Total	22,171	11,577	1,912	1,072	349	37,081
Injury Crashes						
Single Vehicle	149,000	330,000	37,000	43,000	5,000	564,000
Multiple Vehicle	1,453,000	7,000	2,000	3,000	*	1,465,000
Total	1,602,000	337,000	40,000	46,000	5,000	2,029,000
Property-Damage-Only Crashes						
Single Vehicle	315,000	508,000	274,000	63,000	14,000	1,174,000
Multiple Vehicle	3,073,000	11,000	5,000	4,000	1,000	3,094,000
Total	3,389,000	519,000	279,000	67,000	15,000	4,269,000
All Crashes						
Single Vehicle	471,000	849,000	313,000	106,000	19,000	1,759,000
Multiple Vehicle	4,542,000	18,000	8,000	7,000	1,000	4,576,000
Total	5,013,000	867,000	321,000	113,000	20,000	6,335,000

* Less than 500.

Table 28
Crashes by Relation to Junction, Traffic Control Device, and Crash Severity

Relation to Junction	Traffic Control Device				Total
	None	Traffic Signal	Stop Sign	Other/Unknown	
Fatal Crashes					
Nonjunction	25,060	87	207	1,220	26,574
Junction:					
Intersection	1,739	2,237	3,074	202	7,252
Intersection Related	614	479	197	53	1,343
Other/Unknown	1,332	46	62	472	1,912
Total	28,745	2,849	3,540	1,947	37,081
Injury Crashes					
Nonjunction	793,000	3,000	*	39,000	836,000
Junction:					
Intersection	146,000	302,000	211,000	15,000	673,000
Intersection Related	77,000	143,000	39,000	6,000	264,000
Other/Unknown	208,000	15,000	14,000	19,000	255,000
Total	1,224,000	462,000	264,000	79,000	2,029,000
Property-Damage-Only Crashes					
Nonjunction	1,803,000	15,000	3,000	80,000	1,901,000
Junction:					
Intersection	280,000	448,000	323,000	37,000	1,088,000
Intersection Related	196,000	354,000	95,000	25,000	670,000
Other/Unknown	492,000	36,000	32,000	49,000	609,000
Total	2,771,000	853,000	453,000	191,000	4,269,000
All Crashes					
Nonjunction	2,622,000	18,000	3,000	120,000	2,763,000
Junction:					
Intersection	428,000	752,000	537,000	53,000	1,769,000
Intersection Related	273,000	498,000	134,000	31,000	936,000
Other/Unknown	701,000	51,000	46,000	69,000	866,000
Total	4,024,000	1,318,000	721,000	272,000	6,335,000

Table 29
Crashes by Speed Limit, Crash Type, and Crash Severity

Speed Limit	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
30 mph or less	2,792	13.4	1,075	6.6	3,867	10.4
35 or 40 mph	3,699	17.7	2,575	15.9	6,274	16.9
45 or 50 mph	3,347	16.0	3,295	20.4	6,642	17.9
55 mph	6,454	30.9	6,042	37.3	12,496	33.7
60 mph or higher	3,859	18.5	2,944	18.2	6,803	18.3
No Statutory Limit	113	0.5	39	0.2	152	0.4
Unknown	633	3.0	214	1.3	847	2.3
Total	20,897	100.0	16,184	100.0	37,081	100.0
Injury Crashes						
30 mph or less	152,000	26.9	313,000	21.3	465,000	22.9
35 or 40 mph	121,000	21.4	569,000	38.8	689,000	34.0
45 or 50 mph	79,000	14.0	313,000	21.3	392,000	19.3
55 mph	142,000	25.2	179,000	12.2	321,000	15.8
60 mph or higher	69,000	12.2	91,000	6.2	160,000	7.9
No Statutory Limit	2,000	0.3	1,000	0.1	3,000	0.1
Total	564,000	100.0	1,465,000	100.0	2,029,000	100.0
Property-Damage-Only Crashes						
30 mph or less	354,000	30.2	850,000	27.5	1,204,000	28.2
35 or 40 mph	184,000	15.7	1,143,000	36.9	1,327,000	31.1
45 or 50 mph	145,000	12.3	612,000	19.8	757,000	17.7
55 mph	354,000	30.1	312,000	10.1	666,000	15.6
60 mph or higher	132,000	11.3	171,000	5.5	304,000	7.1
No Statutory Limit	5,000	0.4	5,000	0.2	10,000	0.2
Total	1,174,000	100.0	3,094,000	100.0	4,269,000	100.0
All Crashes						
30 mph or less	509,000	28.9	1,164,000	25.4	1,673,000	26.4
35 or 40 mph	308,000	17.5	1,715,000	37.5	2,023,000	31.9
45 or 50 mph	227,000	12.9	928,000	20.3	1,155,000	18.2
55 mph	502,000	28.5	498,000	10.9	1,000,000	15.8
60 mph or higher	205,000	11.6	265,000	5.8	470,000	7.4
No Statutory Limit	7,000	0.4	6,000	0.1	13,000	0.2
Total*	1,759,000	100.0	4,576,000	100.0	6,335,000	100.0

Table 30
Fatal Crashes by Speed Limit and Land Use

Speed Limit	Land Use						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
30 mph or less	954	24.7	2,857	73.9	56	1.4	3,867	100.0
35 or 40 mph	1,895	30.2	4,323	68.9	56	0.9	6,274	100.0
45 or 50 mph	3,401	51.2	3,184	47.9	57	0.9	6,642	100.0
55 mph	10,181	81.5	2,265	18.1	50	0.4	12,496	100.0
60 mph or higher	4,990	73.3	1,798	26.4	15	0.2	6,803	100.0
No Statutory Limit	136	89.5	15	9.9	1	0.7	152	100.0
Unknown	392	46.3	426	50.3	29	3.4	847	100.0
Total	21,949	59.2	14,868	40.1	264	0.7	37,081	100.0

Figure 12
Percent of Fatal Crashes by Speed Limit and Land Use

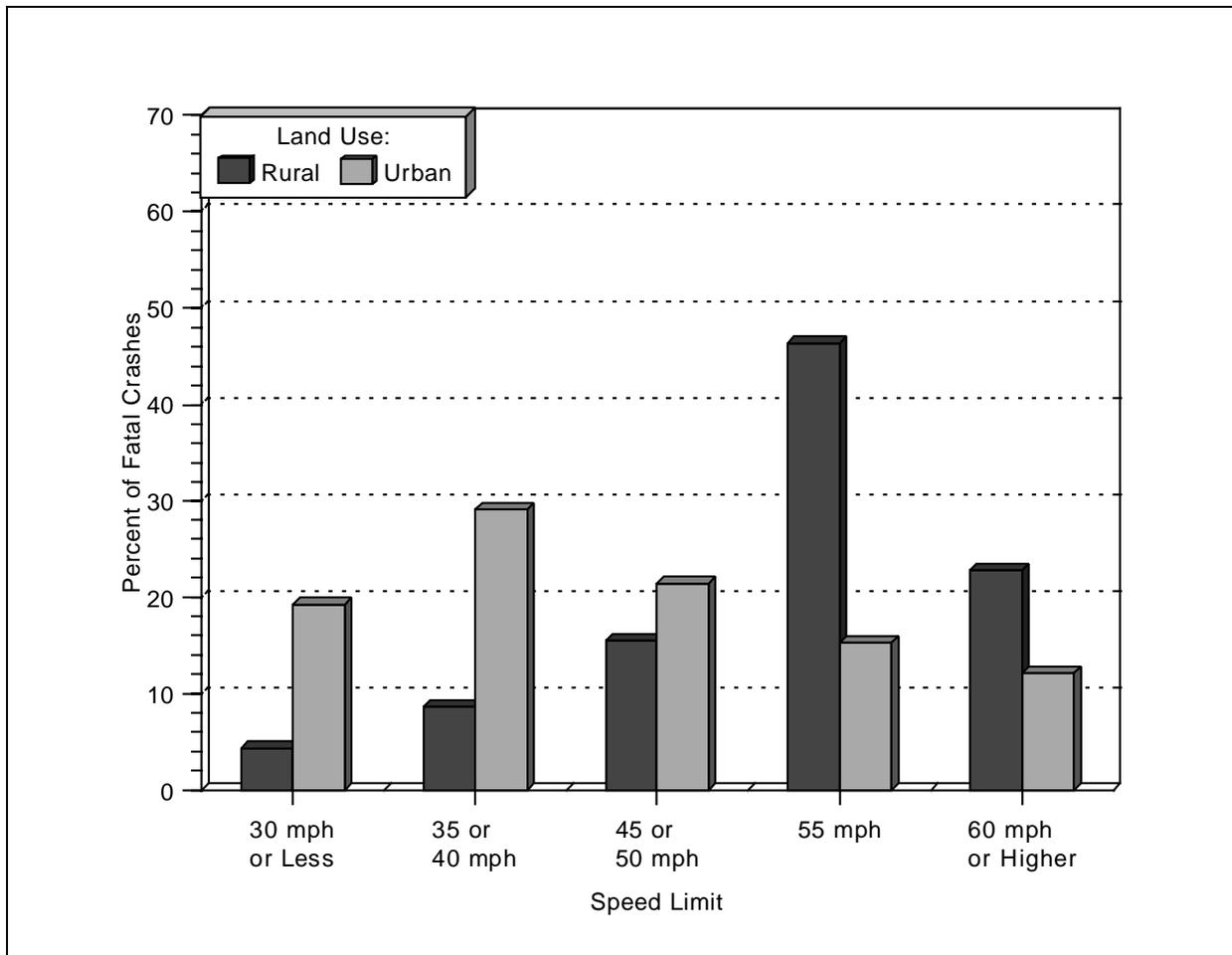


Table 31
Crashes by Number of Lanes, Trafficway Flow, and Crash Severity

Number of Lanes	Trafficway Flow				Total
	Not Divided	Divided	One-Way	Unknown	
Fatal Crashes					
One Lane	22	140	42	3	207
Two Lanes	21,781	6,659	133	20	28,593
Three Lanes	326	2,086	78	11	2,501
Four Lanes	2,104	1,972	20	4	4,100
More Than Four	257	626	9	5	897
Unknown	222	153	16	392	783
Total	24,712	11,636	298	435	37,081
Injury Crashes					
One Lane	*	2,000	29,000	1,000	33,000
Two Lanes	611,000	170,000	18,000	42,000	841,000
Three Lanes	58,000	165,000	10,000	11,000	244,000
Four Lanes	154,000	97,000	6,000	11,000	268,000
More Than Four	189,000	38,000	1,000	6,000	234,000
Unknown	160,000	48,000	16,000	186,000	409,000
Total	1,172,000	520,000	81,000	256,000	2,029,000
Property-Damage-Only Crashes					
One Lane	3,000	7,000	69,000	8,000	86,000
Two Lanes	1,184,000	300,000	38,000	148,000	1,670,000
Three Lanes	129,000	263,000	26,000	29,000	446,000
Four Lanes	304,000	150,000	12,000	29,000	496,000
More Than Four	350,000	66,000	3,000	20,000	438,000
Unknown	371,000	119,000	22,000	620,000	1,132,000
Total	2,340,000	904,000	169,000	854,000	4,269,000
All Crashes					
One Lane	4,000	9,000	98,000	9,000	119,000
Two Lanes	1,816,000	477,000	56,000	190,000	2,539,000
Three Lanes	187,000	430,000	36,000	40,000	693,000
Four Lanes	461,000	249,000	18,000	40,000	768,000
More Than Four	539,000	104,000	4,000	26,000	673,000
Unknown	530,000	167,000	39,000	806,000	1,542,000
Total	3,537,000	1,436,000	250,000	1,111,000	6,335,000

* Less than 500.

Table 32
Crashes by First Harmful Event, Manner of Collision, and Crash Severity

First Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport:								
Angle	7,489	20.2	754,000	37.2	1,504,000	35.2	2,266,000	35.8
Rear End	1,896	5.1	608,000	30.0	1,262,000	29.6	1,872,000	29.6
Sideswipe	599	1.6	39,000	1.9	252,000	5.9	291,000	4.6
Head On	5,243	14.1	47,000	2.3	34,000	0.8	87,000	1.4
Other/Unknown	65	0.2	*	*	2,000	*	2,000	*
<i>Subtotal</i>	<i>15,292</i>	<i>41.2</i>	<i>1,449,000</i>	<i>71.4</i>	<i>3,054,000</i>	<i>71.5</i>	<i>4,518,000</i>	<i>71.3</i>
Collision with Fixed Object:								
Pole/Post	1,819	4.9	63,000	3.1	108,000	2.5	173,000	2.7
Culvert/Curb/Ditch	2,020	5.4	70,000	3.5	121,000	2.8	193,000	3.1
Shrubbery/Tree	2,935	7.9	59,000	2.9	68,000	1.6	130,000	2.0
Guard Rail	1,132	3.1	35,000	1.7	64,000	1.5	100,000	1.6
Embankment	1,146	3.1	31,000	1.5	34,000	0.8	66,000	1.0
Bridge	357	1.0	8,000	0.4	8,000	0.2	16,000	0.3
Other/Unknown	1,473	4.0	74,000	3.6	154,000	3.6	229,000	3.6
<i>Subtotal</i>	<i>10,882</i>	<i>29.3</i>	<i>339,000</i>	<i>16.7</i>	<i>558,000</i>	<i>13.1</i>	<i>908,000</i>	<i>14.3</i>
Collision with Object Not Fixed:								
Parked Motor Vehicle	455	1.2	36,000	1.8	286,000	6.7	323,000	5.1
Animal	162	0.4	13,000	0.6	247,000	5.8	260,000	4.1
Pedestrian	4,893	13.2	62,000	3.1	2,000	*	69,000	1.1
Pedalcyclist	752	2.0	52,000	2.6	6,000	0.1	58,000	0.9
Train	279	0.8	1,000	*	1,000	*	2,000	*
Other/Unknown	255	0.7	4,000	0.2	22,000	0.5	27,000	0.4
<i>Subtotal</i>	<i>6,796</i>	<i>18.3</i>	<i>168,000</i>	<i>8.3</i>	<i>565,000</i>	<i>13.2</i>	<i>739,000</i>	<i>11.7</i>
Noncollision:								
Rollover	3,713	10.0	65,000	3.2	44,000	1.0	112,000	1.8
Other/Unknown	380	1.0	9,000	0.4	48,000	1.1	57,000	0.9
<i>Subtotal</i>	<i>4,093</i>	<i>11.0</i>	<i>73,000</i>	<i>3.6</i>	<i>92,000</i>	<i>2.1</i>	<i>169,000</i>	<i>2.7</i>
Total**	37,081	100.0	2,029,000	100.0	4,269,000	100.0	6,335,000	100.0

* Less than 0.05 percent.

** Includes 18 fatal crashes with an unknown first harmful event.

Table 33
Two-Vehicle Crashes by Vehicle Type and Crash Severity

Vehicle Type	Vehicle Type					
	Passenger Car	Light Truck	Large Truck	Motorcycle	Bus	Other/Unknown
Fatal Crashes (Total = 13,697)						
Passenger Car . . .	3,261	4,810	1,771	497	97	134
Light Truck		1,203	1,022	420	35	116
Large Truck			103	80	8	29
Motorcycle				42	7	13
Bus					0	4
Other/Unknown						45
Injury Crashes (Total = 1,254,000)						
Passenger Car . . .	597,000	466,000	39,000	13,000	7,000	3,000
Light Truck		103,000	14,000	6,000	1,000	1,000
Large Truck			2,000	*	*	*
Property-Damage-Only Crashes (Total = 2,900,000)						
Passenger Car . . .	1,241,000	1,111,000	142,000	4,000	23,000	5,000
Light Truck		288,000	60,000	2,000	7,000	2,000
Large Truck			14,000	*	1,000	*

* Less than 500.

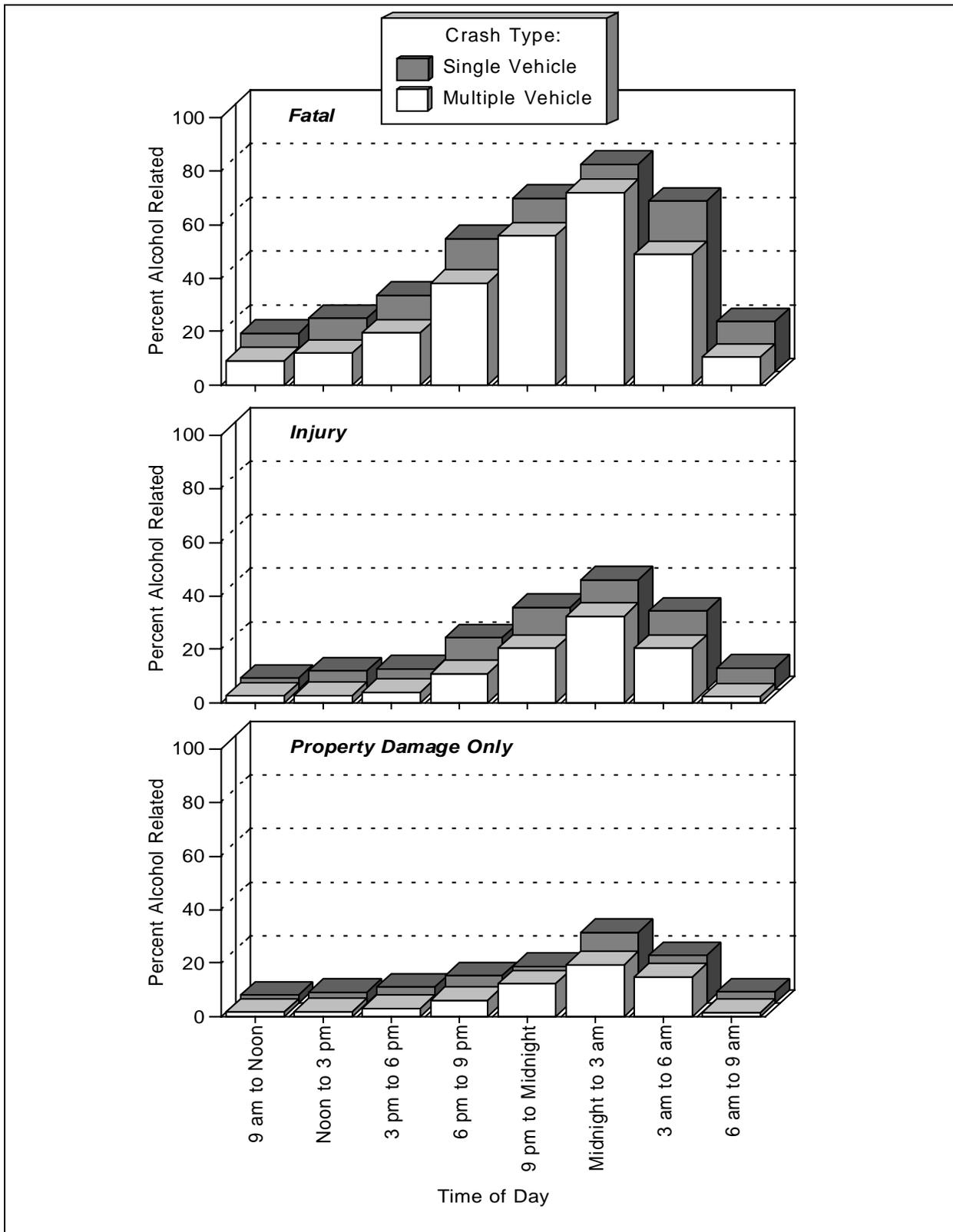
Table 34
Crashes and Percent Alcohol Related by Time of Day, Crash Type, and Crash Severity

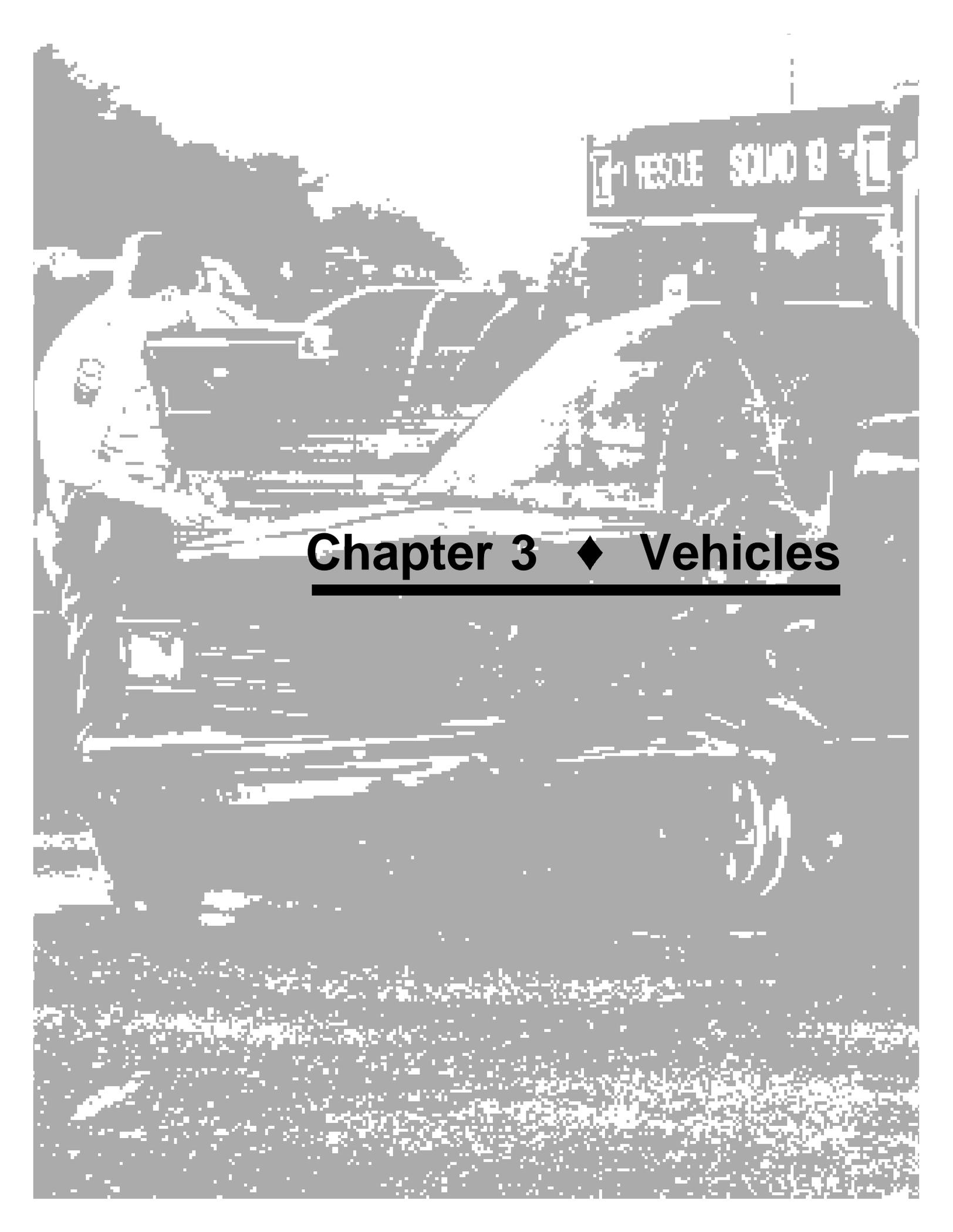
Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicle			Number	Alcohol Related	Percent Alcohol Related
	Number	Alcohol Related	Percent Alcohol Related	Number	Alcohol Related	Percent Alcohol Related			
Fatal Crashes*									
Midnight to 3 am	3,528	2,733	77	1,036	746	72	4,564	3,479	76
3 am to 6 am	2,030	1,295	64	694	340	49	2,724	1,635	60
6 am to 9 am	1,705	321	19	1,875	195	10	3,580	516	14
9 am to Noon	1,581	225	14	2,190	198	9	3,771	423	11
Noon to 3 pm	2,062	411	20	2,908	347	12	4,970	758	15
3 pm to 6 pm	2,806	805	29	3,407	663	19	6,213	1,468	24
6 pm to 9 pm	3,389	1,689	50	2,408	923	38	5,797	2,613	45
9 pm to Midnight	3,486	2,261	65	1,649	922	56	5,135	3,183	62
Unknown	310	197	64	17	4	22	327	201	62
Total	20,897	9,940	48	16,184	4,338	27	37,081	14,278	39
Injury Crashes**									
Midnight to 3 am	55,000	23,000	41	41,000	13,000	33	96,000	36,000	38
3 am to 6 am	43,000	13,000	30	21,000	4,000	20	64,000	17,000	27
6 am to 9 am	64,000	5,000	8	165,000	4,000	2	228,000	9,000	4
9 am to Noon	58,000	2,000	4	204,000	5,000	3	262,000	8,000	3
Noon to 3 pm	79,000	6,000	7	316,000	8,000	3	395,000	14,000	4
3 pm to 6 pm	100,000	8,000	8	410,000	17,000	4	510,000	24,000	5
6 pm to 9 pm	90,000	18,000	19	207,000	22,000	11	297,000	40,000	13
9 pm to Midnight	74,000	23,000	31	102,000	21,000	20	176,000	44,000	25
Total	564,000	96,000	17	1,465,000	95,000	6	2,029,000	191,000	9
Property-Damage-Only Crashes**									
Midnight to 3 am	120,000	32,000	27	59,000	11,000	19	178,000	43,000	24
3 am to 6 am	88,000	16,000	18	30,000	4,000	15	118,000	20,000	17
6 am to 9 am	154,000	7,000	4	397,000	6,000	1	551,000	12,000	2
9 am to Noon	122,000	4,000	3	447,000	8,000	2	569,000	11,000	2
Noon to 3 pm	145,000	6,000	4	693,000	13,000	2	838,000	19,000	2
3 pm to 6 pm	180,000	11,000	6	890,000	27,000	3	1,070,000	38,000	4
6 pm to 9 pm	205,000	21,000	10	406,000	24,000	6	612,000	46,000	7
9 pm to Midnight	160,000	22,000	14	173,000	21,000	12	333,000	43,000	13
Total	1,174,000	118,000	10	3,094,000	115,000	4	4,269,000	233,000	5

* Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater.

** Police-reported alcohol involvement.

Figure 13
Percent of Crashes Alcohol Related, by Time of Day and Crash Severity





Chapter 3 ♦ Vehicles



3. VEHICLES

Statistics about the vehicles involved in motor vehicle crashes are presented in this chapter, according to six major vehicle types: **Passenger Cars**, **Light Trucks** (including pickups, vans, and utility vehicles with a gross vehicle weight rating of 10,000 pounds or less), **Large Trucks** (including single-unit trucks and truck tractors with a gross vehicle weight rating of more than 10,000 pounds), **Motorcycles** (including motorcycles, mopeds, and motorscooters), **Buses** (including school buses and transit buses), and **Other Vehicles** (including all-terrain vehicles, farm and construction equipment, and motorhomes). The tables and figures are presented for all vehicle types first, then by individual vehicle type. Below are some of the vehicle statistics you will find in this section:

- Ninety-five percent of the 11 million vehicles involved in motor vehicle crashes in 1998 were passenger cars or light trucks.
- Large trucks accounted for 9 percent of the vehicles in fatal crashes, but only 4 percent of the vehicles involved in injury and property-damage-only crashes. Of the 4,935 large trucks involved in fatal crashes, 76 percent were combination trucks.
- The proportion of vehicles that rolled over in fatal crashes (18.8 percent) was almost 5 times as high as the proportion in injury crashes (4.1 percent) and nearly 16 times as high as the proportion in property-damage-only crashes (1.2 percent).
- Compared with other vehicle types, utility vehicles experienced the highest rollover rates: 36.0 percent in fatal crashes, 10.5 percent in injury crashes, and 2.5 percent in property-damage-only crashes.
- Fires occurred in 0.1 percent of the vehicles involved in all traffic crashes in 1998. For fatal crashes, however, fires occurred in nearly 3 percent of the vehicles involved.
- Regardless of crash severity, the majority of vehicles in single- and two-vehicle crashes were going straight prior to the crash. The next most common vehicle maneuver differed by crash severity: negotiating a curve for fatal crashes, turning left for injury crashes, and stopped in traffic lane for property-damage-only crashes.
- Motorcycles in fatal crashes had the highest proportion of collisions with fixed objects (30.1 percent), and buses in fatal crashes had the lowest proportion (0.4 percent).

Table 35
Vehicles Involved in Crashes by Vehicle Type and Crash Severity

Vehicle Type	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	28,992	51.0	2,545,000	67.7	4,896,000	64.5	7,470,000	65.5
Light Truck	19,217	33.8	1,059,000	28.2	2,315,000	30.5	3,393,000	29.8
Large Truck	4,935	8.7	89,000	2.4	318,000	4.2	412,000	3.6
Motorcycle	2,324	4.1	45,000	1.2	9,000	0.1	55,000	0.5
Bus	285	0.5	13,000	0.3	40,000	0.5	53,000	0.5
Other	450	0.8	7,000	0.2	9,000	0.1	16,000	0.1
Total*	56,865	100.0	3,757,000	100.0	7,587,000	100.0	11,400,000	100.0

* Includes 662 vehicles of unknown type involved in fatal crashes.

Figure 14
Proportion of Vehicles Involved in Traffic Crashes

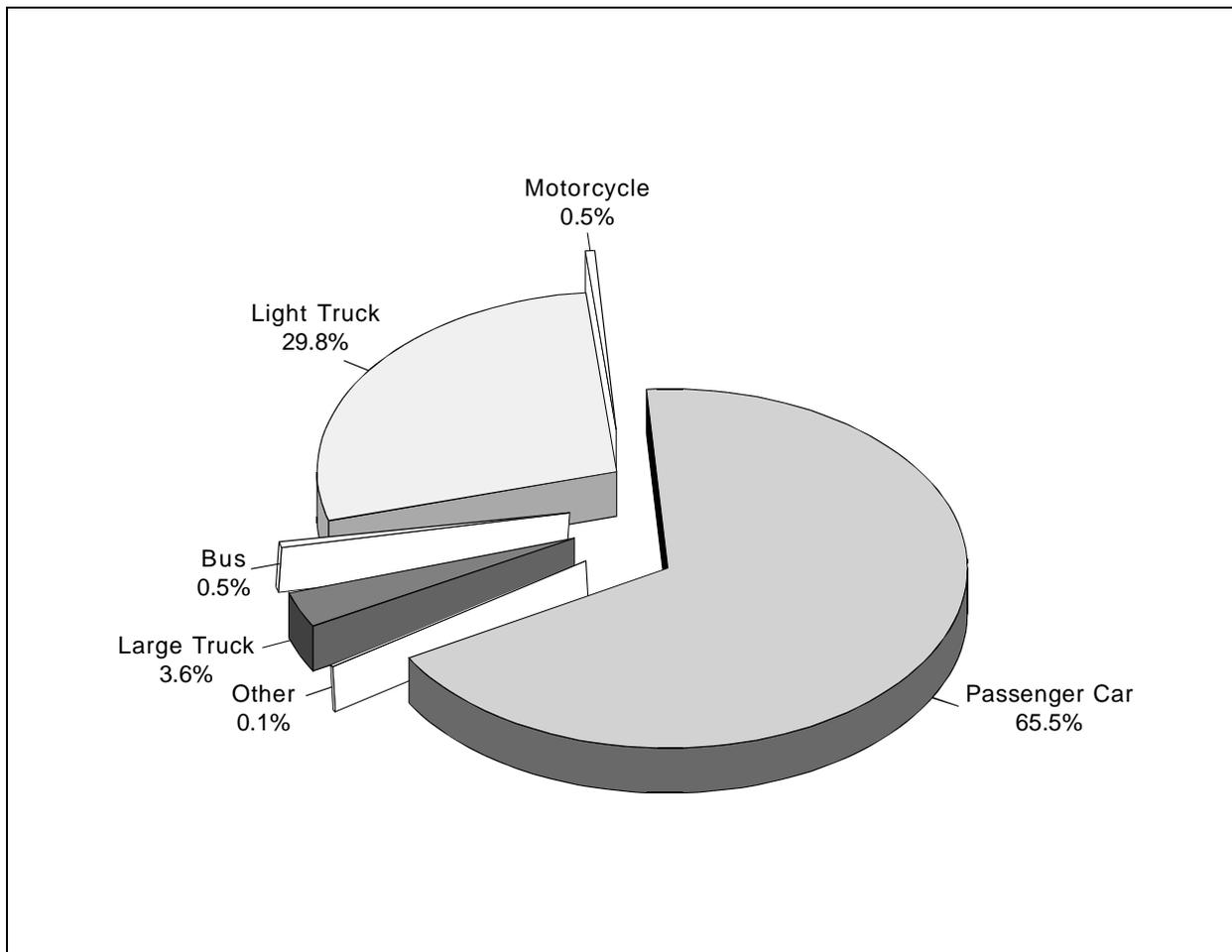


Table 36
Vehicles Involved in Fatal Crashes by Body Type

Body Type	Number	Percent	Body Type	Number	Percent
Passenger Cars	28,992	51.0	Large Trucks	4,935	8.7
Convertible	297	0.5	Step Van	21	*
2 Door Sedan, Hardtop, Coupe	8,353	14.7	Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb)	165	0.3
3 Door/2 Door Hatchback	1,882	3.3	Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb)	249	0.4
4 Door Sedan Hardtop	16,235	28.6	Single Unit Heavy Truck (GVWR > 26,000 lb)	863	1.5
5 Door/4 Door Hatchback	473	0.8	Single Unit Truck, Unknown GVWR	48	0.1
Station Wagon	1,066	1.9	Truck Tractor	3,554	6.2
Hatchback, Doors Unknown	45	0.1	Unknown Medium Truck (10,000 lb < GVWR ≤ 26,000 lb)	5	*
Other Auto	105	0.2	Unknown Heavy Truck (GVWR > 26,000 lb)	6	*
Unknown Auto	469	0.8	Unknown Large Truck Type	23	*
Auto-Based Pickup	67	0.1	Unknown Truck	1	*
Light Trucks	19,217	33.8	Motorcycles	2,324	4.1
Compact Utility	3,460	6.1	Motorcycle	2,215	3.9
Large Utility	677	1.2	Moped	33	0.1
Utility Station Wagon	346	0.6	Three Wheel Motorcycle or Moped	2	*
Utility, Unknown Body Type	16	*	Off-Road Motorcycle (Two Wheel)	40	0.1
Minivan	2,257	4.0	Other Motorcycle/Minibike	30	0.1
Large Van	1,403	2.5	Unknown Motorcycle	4	*
Step Van	68	0.1	Buses	285	0.5
Van-Based School Bus	5	*	School Bus	111	0.2
Van-Based Transit Bus	6	*	Cross Country/Intercity Bus	37	0.1
Other Van Type	16	*	Transit Bus	115	0.2
Unknown Van Type	58	0.1	Other Bus	15	*
Compact Pickup	4,252	7.5	Unknown Bus	7	*
Standard Pickup	6,383	11.2	Other Vehicles	450	0.8
Pickup with Camper	43	0.1	Large Limousine	5	*
Convertible Pickup	2	*	Van-Based Motorhome	30	0.1
Unknown Pickup Style Truck	122	0.2	Light Truck-Based Motorhome	2	*
Cab Chassis-Based Light Truck	86	0.2	Large Truck-Based Motorhome	24	*
Other Conventional Light Truck	1	*	Unknown Truck Camper/Motorhome	40	0.1
Unknown Light Truck (not pickup)	6	*	All Terrain Vehicle	149	0.3
Unknown Light Vehicle Type	7	*	Snowmobile	46	0.1
Unknown Truck	3	*	Farm Equipment Except Trucks	84	0.1
			Construction Equipment Except Trucks	22	*
			Other Vehicle	48	0.1
			Unknown Body Type	662	1.2
			Total	56,865	100.0

* Less than 0.05 percent.

Table 37
Vehicles Involved in Crashes by Vehicle Type, Rollover Occurrence, and Crash Severity

Vehicle Type	Rollover Occurrence				Total	
	Yes		No		Number	Percent
	Number	Percent	Number	Percent		
Fatal Crashes						
Passenger Car	4,389	15.1	24,603	84.9	28,992	100.0
Light Truck						
Pickup	2,643	24.5	8,159	75.5	10,802	100.0
Utility	1,620	36.0	2,879	64.0	4,499	100.0
Van	773	20.3	3,040	79.7	3,813	100.0
Other	13	12.6	90	87.4	103	100.0
Large Truck	683	13.8	4,252	86.2	4,935	100.0
Bus	9	3.2	276	96.8	285	100.0
Other/Unknown	150	13.5	962	86.5	1,112	100.0
Total*	10,280	18.8	44,261	81.2	54,541	100.0
Injury Crashes						
Passenger Car	74,000	2.9	2,471,000	97.1	2,545,000	100.0
Light Truck						
Pickup	31,000	6.2	468,000	93.8	499,000	100.0
Utility	23,000	10.5	200,000	89.5	224,000	100.0
Van	9,000	3.8	234,000	96.2	243,000	100.0
Other	5,000	5.2	89,000	94.8	93,000	100.0
Large Truck	10,000	11.4	79,000	88.6	89,000	100.0
Bus	**	**	13,000	100.0	13,000	100.0
Other/Unknown	1,000	11.6	6,000	88.4	7,000	100.0
Total*	153,000	4.1	3,559,000	95.9	3,712,000	100.0
Property-Damage-Only Crashes						
Passenger Car	41,000	0.8	4,855,000	99.2	4,896,000	100.0
Light Truck						
Pickup	23,000	2.0	1,137,000	98.0	1,160,000	100.0
Utility	11,000	2.5	444,000	97.5	455,000	100.0
Van	5,000	0.9	542,000	99.1	547,000	100.0
Other	2,000	1.6	150,000	98.4	153,000	100.0
Large Truck	8,000	2.4	310,000	97.6	318,000	100.0
Bus	**	**	40,000	100.0	40,000	100.0
Other/Unknown	**	2.4	9,000	97.6	9,000	100.0
Total*	90,000	1.2	7,488,000	98.8	7,578,000	100.0
All Crashes						
Passenger Car	119,000	1.6	7,351,000	98.4	7,470,000	100.0
Light Truck						
Pickup	56,000	3.4	1,613,000	96.6	1,670,000	100.0
Utility	36,000	5.3	647,000	94.7	684,000	100.0
Van	15,000	1.9	778,000	98.1	793,000	100.0
Other	7,000	3.0	239,000	97.0	246,000	100.0
Large Truck	19,000	4.5	393,000	95.5	412,000	100.0
Bus	**	**	53,000	100.0	53,000	100.0
Other/Unknown	1,000	6.9	16,000	93.1	17,000	100.0
Total*	253,000	2.2	11,091,000	97.8	11,345,000	100.0

* Excludes motorcycles.

** Less than 500 or less than 0.05 percent.

Figure 15
Percent Rollover Occurrence by Vehicle Type and Crash Severity

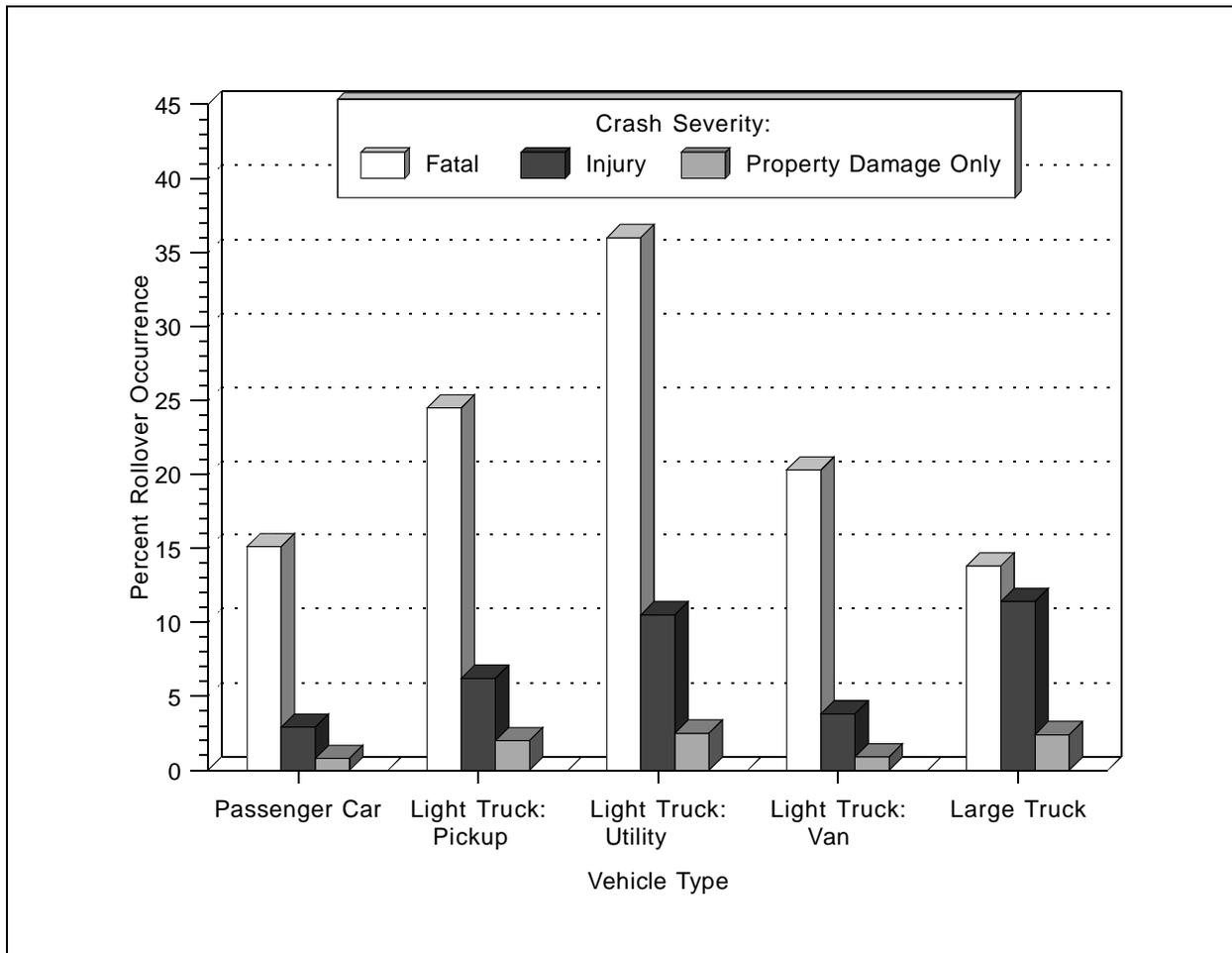


Table 38
Vehicles Involved in Crashes by Vehicle Type, Fire Occurrence, and Crash Severity

Vehicle Type	Fire Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
Passenger Car	738	2.5	28,254	97.5	28,992	100.0
Light Truck	565	2.9	18,652	97.1	19,217	100.0
Large Truck	279	5.7	4,656	94.3	4,935	100.0
Motorcycle	40	1.7	2,284	98.3	2,324	100.0
Bus	2	0.7	283	99.3	285	100.0
Other/Unknown	14	1.3	1,098	98.7	1,112	100.0
Total	1,638	2.9	55,227	97.1	56,865	100.0
Injury Crashes						
Passenger Car	3,000	0.1	2,542,000	99.9	2,545,000	100.0
Light Truck	1,000	0.1	1,058,000	99.9	1,059,000	100.0
Large Truck	*	0.4	88,000	99.6	89,000	100.0
Motorcycle	*	0.1	45,000	99.9	45,000	100.0
Bus	*	*	13,000	100.0	13,000	100.0
Other/Unknown	*	*	7,000	100.0	7,000	100.0
Total	4,000	0.1	3,753,000	99.9	3,757,000	100.0
Property-Damage-Only Crashes						
Passenger Car	3,000	0.1	4,893,000	99.9	4,896,000	100.0
Light Truck	2,000	0.1	2,313,000	99.9	2,315,000	100.0
Large Truck	1,000	0.3	317,000	99.7	318,000	100.0
Motorcycle	*	*	9,000	100.0	9,000	100.0
Bus	*	*	40,000	100.0	40,000	100.0
Other/Unknown	*	*	9,000	100.0	9,000	100.0
Total	6,000	0.1	7,581,000	99.9	7,587,000	100.0
All Crashes						
Passenger Car	7,000	0.1	7,463,000	99.9	7,470,000	100.0
Light Truck	3,000	0.1	3,390,000	99.9	3,393,000	100.0
Large Truck	2,000	0.4	410,000	99.6	412,000	100.0
Motorcycle	*	0.1	55,000	99.9	55,000	100.0
Bus	*	*	53,000	100.0	53,000	100.0
Other/Unknown	*	0.1	17,000	99.9	17,000	100.0
Total	12,000	0.1	11,389,000	99.9	11,400,000	100.0

* Less than 500 or less than 0.05 percent.

Table 39
Vehicles Involved in Single- and Two-Vehicle Crashes by Vehicle Maneuver and Crash Severity

Vehicle Maneuver	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Going Straight	32,775	67.9	1,916,000	62.4	3,834,000	55.2	5,783,000	57.5
Turning Left	2,940	6.1	360,000	11.7	667,000	9.6	1,030,000	10.2
Stopped in Traffic Lane	611	1.3	276,000	9.0	715,000	10.3	991,000	9.8
Turning Right	318	0.7	75,000	2.4	289,000	4.2	365,000	3.6
Slowed in Traffic Lane	312	0.6	122,000	4.0	340,000	4.9	462,000	4.6
Merging/Changing Lanes	790	1.6	55,000	1.8	257,000	3.7	314,000	3.1
Negotiating Curve	7,119	14.7	50,000	1.6	81,000	1.2	139,000	1.4
Backing Up	183	0.4	10,000	0.3	122,000	1.8	133,000	1.3
Passing Other Vehicle	987	2.0	30,000	1.0	103,000	1.5	134,000	1.3
Starting in Traffic Lane	577	1.2	41,000	1.3	89,000	1.3	130,000	1.3
Leaving Parking Space	34	0.1	6,000	0.2	49,000	0.7	55,000	0.5
Making U-Turn	184	0.4	14,000	0.5	42,000	0.6	56,000	0.6
Entering Parking Space	10	*	1,000	*	22,000	0.3	23,000	0.2
Disabled in Traffic Lane	20	*	4,000	0.1	8,000	0.1	12,000	0.1
Other Maneuver	1,108	2.3	108,000	3.5	330,000	4.7	439,000	4.4
Total**	48,291	100.0	3,068,000	100.0	6,949,000	100.0	10,065,000	100.0

* Less than 0.05 percent.

** Includes 323 vehicles involved in fatal crashes with unknown vehicle maneuver.

Table 40
Vehicles Involved in Fatal Crashes by Roadway Function Class,
Crash Type, and Hazardous Cargo

Roadway Function Class	Crash Type				Total	
	Single Vehicle		Multiple Vehicle		Hazardous Cargo	Total
	Hazardous Cargo	Total	Hazardous Cargo	Total		
Rural Fatal Crashes						
Principal Arterial						
Interstate	8	1,727	26	2,166	34	3,893
Other	9	1,702	39	6,188	48	7,890
Minor Arterial	6	1,618	26	4,391	32	6,009
Major Collector	6	3,086	11	4,332	17	7,418
Minor Collector	1	1,044	5	1,101	6	2,145
Local Road or Street	2	3,100	6	2,035	8	5,135
Unknown Rural	1	262	4	272	5	534
Total	33	12,539	117	20,485	150	33,024
Urban Fatal Crashes						
Principal Arterial						
Interstate	9	1,141	19	2,334	28	3,475
Freeway/Expressway	1	636	3	1,231	4	1,867
Other	1	2,255	18	5,838	19	8,093
Minor Arterial	3	1,644	5	3,201	8	4,845
Collector	1	629	0	716	1	1,345
Local Road or Street	1	1,855	2	1,855	3	3,710
Unknown Urban	0	43	0	68	0	111
Total	16	8,203	47	15,243	63	23,446
All Fatal Crashes						
Principal Arterial						
Interstate	17	2,868	45	4,500	62	7,368
Freeway/Expressway	1	636	3	1,231	4	1,867
Other	10	3,957	57	12,026	67	15,983
Minor Arterial	9	3,262	31	7,592	40	10,854
Collector	8	4,759	16	6,149	24	10,908
Local Road or Street	3	4,955	8	3,890	11	8,845
Unknown Rural	1	262	4	272	5	534
Unknown Urban	0	43	0	68	0	111
Unknown Rural or Urban	0	155	0	240	0	395
Total	49	20,897	164	35,968	213	56,865

Figure 16
Percent of Vehicles in Crashes by Most Harmful Event and Vehicle Type

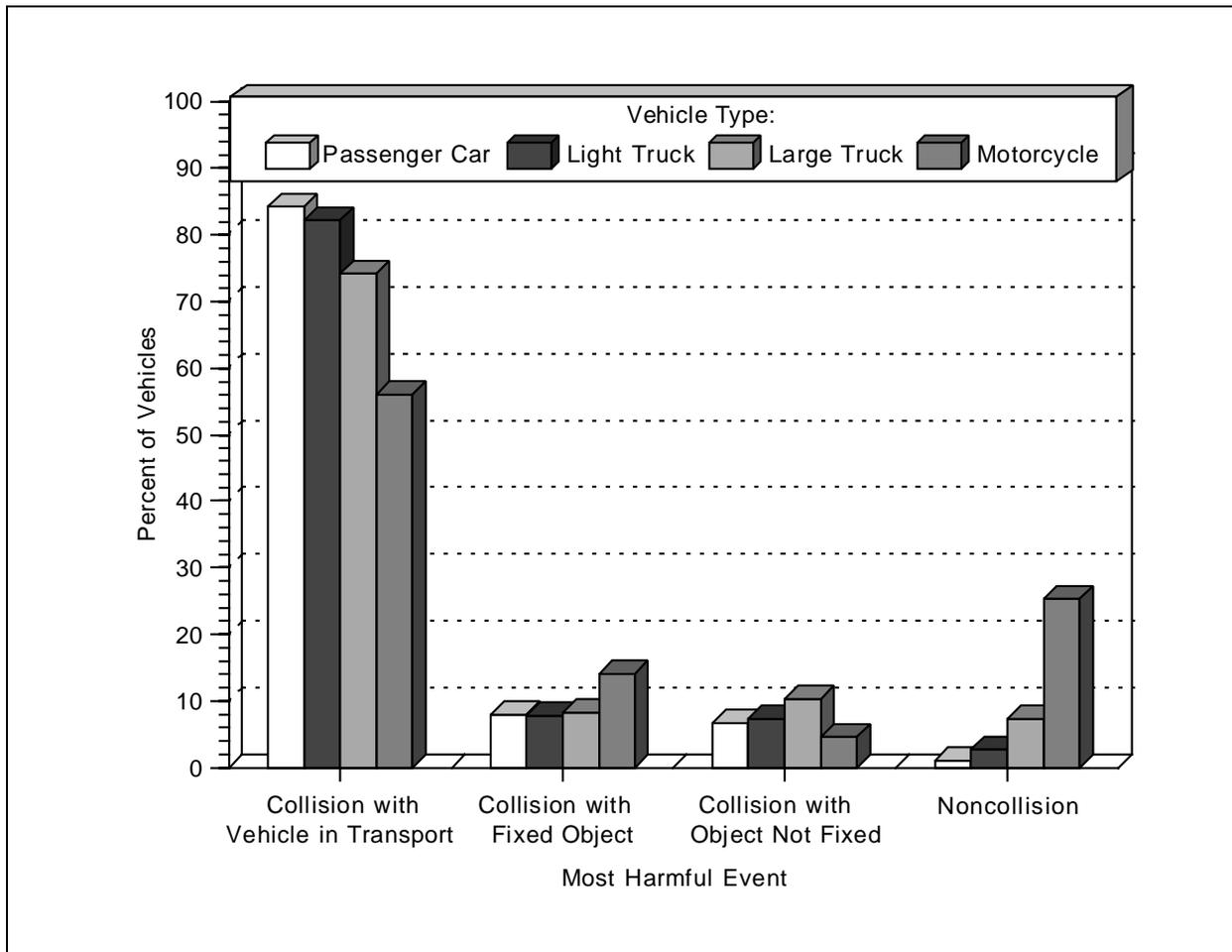
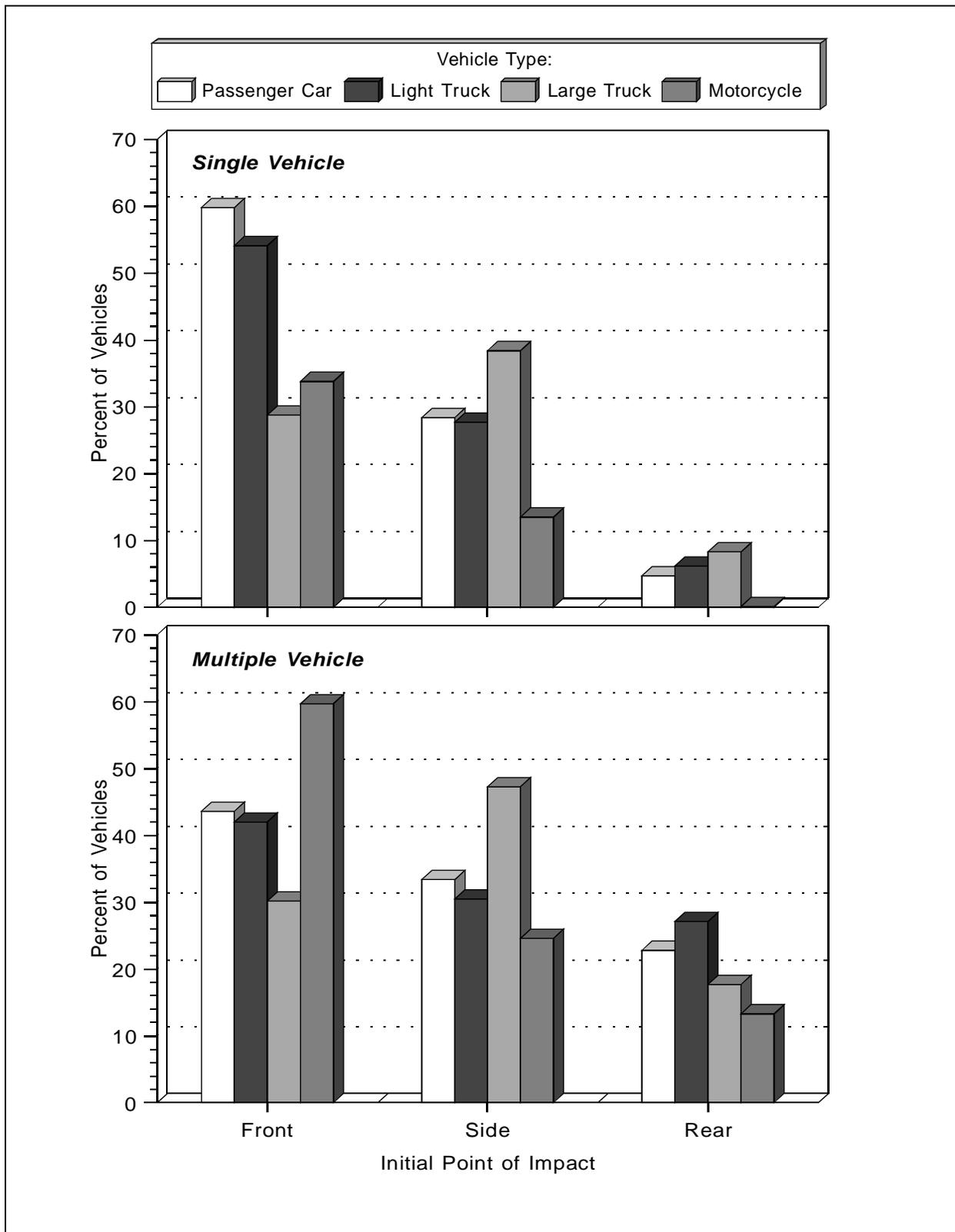


Figure 17
Percent of Vehicles in Crashes by Initial Point of Impact, Crash Type, and Vehicle Type



Note: Excludes other or unknown point of impact and noncollisions.

Table 41
Passenger Cars Involved in Crashes by Most Harmful Event and Crash Severity

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	10,349	35.7	1,008,000	39.6	1,734,000	35.4	2,753,000	36.9
Left Side	2,846	9.8	328,000	12.9	789,000	16.1	1,120,000	15.0
Right Side	2,366	8.2	286,000	11.3	702,000	14.3	991,000	13.3
Rear	1,354	4.7	540,000	21.2	908,000	18.5	1,450,000	19.4
Other/Unknown	252	0.9	1,000	*	1,000	*	2,000	*
<i>Subtotal</i>	<i>17,167</i>	<i>59.2</i>	<i>2,163,000</i>	<i>85.0</i>	<i>4,135,000</i>	<i>84.4</i>	<i>6,315,000</i>	<i>84.5</i>
Collision with Fixed Object	4,833	16.7	217,000	8.5	357,000	7.3	579,000	7.7
Collision with Object Not Fixed:								
Nonmotorist	3,181	11.0	84,000	3.3	6,000	0.1	93,000	1.3
Other	491	1.7	40,000	1.6	361,000	7.4	401,000	5.4
<i>Subtotal</i>	<i>3,672</i>	<i>12.7</i>	<i>124,000</i>	<i>4.9</i>	<i>367,000</i>	<i>7.5</i>	<i>494,000</i>	<i>6.6</i>
Noncollision	3,312	11.4	41,000	1.6	37,000	0.8	82,000	1.1
Total**	28,992	100.0	2,545,000	100.0	4,896,000	100.0	7,470,000	100.0

* Less than 0.05 percent.

** Includes 8 passenger cars involved in fatal crashes with unknown most harmful event.

Table 42
Passenger Cars Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	6,887	63.9	230,000	63.6	419,000	57.8	656,000	59.8
Left Side	952	8.8	39,000	10.9	86,000	11.9	126,000	11.5
Right Side	885	8.2	54,000	14.9	131,000	18.1	186,000	16.9
Rear	250	2.3	8,000	2.1	44,000	6.1	52,000	4.7
Noncollision	1,021	9.5	24,000	6.7	24,000	3.3	49,000	4.5
Other/Unknown	790	7.3	6,000	1.7	21,000	2.9	28,000	2.5
Total	10,785	100.0	362,000	100.0	725,000	100.0	1,098,000	100.0
Multiple-Vehicle Crashes								
Front	10,900	59.9	1,015,000	46.5	1,752,000	42.0	2,777,000	43.6
Left Side	2,975	16.3	333,000	15.2	795,000	19.1	1,131,000	17.7
Right Side	2,481	13.6	292,000	13.4	707,000	17.0	1,002,000	15.7
Rear	1,465	8.0	541,000	24.8	910,000	21.8	1,452,000	22.8
Noncollision	10	0.1	1,000	0.1	3,000	0.1	4,000	0.1
Other/Unknown	376	2.1	1,000	0.1	4,000	0.1	6,000	0.1
Total	18,207	100.0	2,183,000	100.0	4,171,000	100.0	6,372,000	100.0
All Crashes								
Front	17,787	61.4	1,245,000	48.9	2,170,000	44.3	3,433,000	46.0
Left Side	3,927	13.5	372,000	14.6	881,000	18.0	1,257,000	16.8
Right Side	3,366	11.6	346,000	13.6	838,000	17.1	1,188,000	15.9
Rear	1,715	5.9	549,000	21.6	954,000	19.5	1,505,000	20.1
Noncollision	1,031	3.6	26,000	1.0	27,000	0.5	53,000	0.7
Other/Unknown	1,166	4.0	8,000	0.3	25,000	0.5	34,000	0.5
Total	28,992	100.0	2,545,000	100.0	4,896,000	100.0	7,470,000	100.0

Table 43
Light Trucks Involved in Crashes by Most Harmful Event and Crash Severity

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	8,083	42.1	435,000	41.0	746,000	32.2	1,189,000	35.0
Left Side	912	4.7	119,000	11.3	323,000	14.0	443,000	13.1
Right Side	713	3.7	108,000	10.2	307,000	13.3	415,000	12.2
Rear	860	4.5	223,000	21.1	548,000	23.7	772,000	22.8
Other/Unknown	177	0.9	1,000	*	*	*	1,000	*
Subtotal	10,745	55.9	885,000	83.6	1,925,000	83.2	2,822,000	83.2
Collision with Fixed Object	2,108	11.0	90,000	8.5	157,000	6.8	249,000	7.3
Collision with Object Not Fixed:								
Nonmotorist	2,157	11.2	29,000	2.7	1,000	0.1	32,000	1.0
Other	263	1.4	16,000	1.5	187,000	8.1	204,000	6.0
Subtotal	2,420	12.6	45,000	4.3	189,000	8.2	236,000	7.0
Noncollision	3,941	20.5	38,000	3.6	43,000	1.9	86,000	2.5
Total**	19,217	100.0	1,059,000	100.0	2,315,000	100.0	3,393,000	100.0

* Less than 500 or less than 0.05 percent.

** Includes 3 light trucks involved in a fatal crash with unknown most harmful event.

Table 44
Light Trucks Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	4,318	57.3	94,000	57.9	191,000	52.3	289,000	54.1
Left Side	397	5.3	16,000	10.1	41,000	11.3	58,000	10.8
Right Side	421	5.6	23,000	13.9	67,000	18.5	90,000	16.9
Rear	124	1.6	2,000	1.2	31,000	8.6	33,000	6.2
Noncollision	1,751	23.2	25,000	15.5	26,000	7.2	53,000	10.0
Other/Unknown	529	7.0	2,000	1.5	8,000	2.1	11,000	2.0
Total	7,540	100.0	163,000	100.0	365,000	100.0	535,000	100.0
Multiple-Vehicle Crashes								
Front	8,575	73.4	438,000	48.9	753,000	38.6	1,200,000	42.0
Left Side	1,015	8.7	121,000	13.5	326,000	16.7	448,000	15.7
Right Side	805	6.9	110,000	12.3	311,000	16.0	423,000	14.8
Rear	1,003	8.6	224,000	25.0	549,000	28.1	774,000	27.1
Noncollision	17	0.1	2,000	0.2	9,000	0.5	11,000	0.4
Other/Unknown	262	2.2	1,000	0.1	2,000	0.1	3,000	0.1
Total	11,677	100.0	896,000	100.0	1,950,000	100.0	2,858,000	100.0
All Crashes								
Front	12,893	67.1	533,000	50.3	944,000	40.8	1,489,000	43.9
Left Side	1,412	7.3	137,000	13.0	367,000	15.9	506,000	14.9
Right Side	1,226	6.4	133,000	12.6	379,000	16.4	513,000	15.1
Rear	1,127	5.9	226,000	21.3	580,000	25.1	807,000	23.8
Noncollision	1,768	9.2	27,000	2.6	36,000	1.5	65,000	1.9
Other/Unknown	791	4.1	3,000	0.3	10,000	0.4	13,000	0.4
Total	19,217	100.0	1,059,000	100.0	2,315,000	100.0	3,393,000	100.0

Table 45
Large Trucks Involved in Crashes by Most Harmful Event and Crash Severity

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	2,505	50.8	31,000	34.9	62,000	19.6	96,000	23.3
Left Side	411	8.3	16,000	17.8	57,000	18.0	73,000	17.8
Right Side	223	4.5	14,000	15.7	65,000	20.4	79,000	19.2
Rear	646	13.1	11,000	12.9	45,000	14.1	57,000	13.9
Other/Unknown	110	2.2	1,000	0.7	*	0.1	1,000	0.2
<i>Subtotal</i>	<i>3,895</i>	<i>78.9</i>	<i>73,000</i>	<i>82.0</i>	<i>230,000</i>	<i>72.2</i>	<i>306,000</i>	<i>74.4</i>
Collision with Fixed Object	<i>162</i>	<i>3.3</i>	<i>5,000</i>	<i>5.4</i>	<i>31,000</i>	<i>9.6</i>	<i>36,000</i>	<i>8.6</i>
Collision with Object Not Fixed:								
Nonmotorist	390	7.9	1,000	1.3	*	*	2,000	0.4
Other	45	0.9	2,000	2.0	33,000	10.5	35,000	8.5
<i>Subtotal</i>	<i>435</i>	<i>8.8</i>	<i>3,000</i>	<i>3.4</i>	<i>33,000</i>	<i>10.5</i>	<i>37,000</i>	<i>8.9</i>
Noncollision	<i>443</i>	<i>9.0</i>	<i>8,000</i>	<i>9.3</i>	<i>25,000</i>	<i>7.7</i>	<i>33,000</i>	<i>8.1</i>
Total	4,935	100.0	89,000	100.0	318,000	100.0	412,000	100.0

* Less than 500 or less than 0.05 percent.

Table 46
Large Trucks Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	416	51.5	5,000	32.2	20,000	27.9	25,000	28.8
Left Side	45	5.6	1,000	9.0	8,000	11.2	10,000	10.8
Right Side	78	9.7	2,000	14.7	22,000	30.3	24,000	27.6
Rear	45	5.6	*	1.1	7,000	9.7	7,000	8.3
Noncollision	137	17.0	6,000	39.8	10,000	13.8	16,000	18.0
Other/Unknown	87	10.8	*	3.3	5,000	7.0	6,000	6.4
Total	808	100.0	14,000	100.0	73,000	100.0	88,000	100.0
Multiple-Vehicle Crashes								
Front	2,645	64.1	31,000	42.2	64,000	26.0	98,000	30.2
Left Side	439	10.6	16,000	21.6	57,000	23.4	74,000	22.8
Right Side	236	5.7	14,000	18.8	65,000	26.6	79,000	24.5
Rear	668	16.2	11,000	15.4	45,000	18.4	57,000	17.7
Noncollision	3	0.1	1,000	1.5	14,000	5.5	15,000	4.5
Other/Unknown	136	3.3	*	0.5	*	0.1	1,000	0.2
Total	4,127	100.0	75,000	100.0	245,000	100.0	323,000	100.0
All Crashes								
Front	3,061	62.0	36,000	40.6	84,000	26.5	123,000	29.9
Left Side	484	9.8	17,000	19.6	65,000	20.6	83,000	20.2
Right Side	314	6.4	16,000	18.2	87,000	27.5	104,000	25.2
Rear	713	14.4	12,000	13.1	52,000	16.4	65,000	15.7
Noncollision	140	2.8	7,000	7.6	24,000	7.4	31,000	7.4
Other/Unknown	223	4.5	1,000	0.9	5,000	1.6	6,000	1.5
Total	4,935	100.0	89,000	100.0	318,000	100.0	412,000	100.0

* Less than 500 or less than 0.05 percent.

Table 47
Large Trucks Involved in Crashes by Truck Type, Rollover Occurrence,
and Crash Severity

Truck Type	Rollover Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
Single-Unit Truck	189	15.9	1,001	84.1	1,190	100.0
Combination Truck	494	13.2	3,251	86.8	3,745	100.0
Total	683	13.8	4,252	86.2	4,935	100.0
Injury Crashes						
Single-Unit Truck	4,000	10.0	34,000	90.0	38,000	100.0
Combination Truck	6,000	12.5	44,000	87.5	51,000	100.0
Total	10,000	11.4	79,000	88.6	89,000	100.0
Property-Damage-Only Crashes						
Single-Unit Truck	2,000	1.5	138,000	98.5	140,000	100.0
Combination Truck	6,000	3.1	173,000	96.9	178,000	100.0
Total	8,000	2.4	310,000	97.6	318,000	100.0
All Crashes						
Single-Unit Truck	6,000	3.4	173,000	96.6	179,000	100.0
Combination Truck	12,000	5.3	220,000	94.7	233,000	100.0
Total	19,000	4.5	393,000	95.5	412,000	100.0

Table 48
Truck Tractors with Trailers Involved in Crashes by Number of Trailers,
Jackknife Occurrence, and Crash Severity

Number of Trailers	Jackknife Occurrence				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes						
One	277	8.6	2,955	91.4	3,232	100.0
Two or More	24	16.7	120	83.3	144	100.0
Unknown Number	0	--	11	100.0	11	100.0
Total	301	8.9	3,086	91.1	3,387	100.0
Injury Crashes						
One	2,000	4.7	42,000	95.3	44,000	100.0
Two or More	*	11.7	1,000	88.3	1,000	100.0
Unknown Number	*	*	*	100.0	*	100.0
Total	2,000	4.9	43,000	95.1	45,000	100.0
Property-Damage-Only Crashes						
One	3,000	1.8	152,000	98.2	155,000	100.0
Two or More	*	8.6	4,000	91.4	4,000	100.0
Unknown Number	*	*	*	100.0	*	100.0
Total	3,000	2.0	156,000	98.0	159,000	100.0
All Crashes						
One	5,000	2.5	197,000	97.5	202,000	100.0
Two or More	1,000	9.6	5,000	90.4	6,000	100.0
Unknown Number	*	*	1,000	100.0	1,000	100.0
Total	6,000	2.7	202,000	97.3	208,000	100.0

* Less than 500 or less than 0.05 percent.

Table 49
Motorcycles Involved in Crashes by Most Harmful Event and Crash Severity

Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	916	39.4	13,000	29.7	4,000	46.5	18,000	32.7
Left Side	99	4.3	3,000	7.6	1,000	5.8	4,000	7.2
Right Side	68	2.9	3,000	5.6	1,000	10.1	3,000	6.2
Rear	66	2.8	3,000	6.9	1,000	10.8	4,000	7.4
Other/Unknown	48	2.1	1,000	1.2	*	*	1,000	1.1
<i>Subtotal</i>	<i>1,197</i>	<i>51.5</i>	<i>23,000</i>	<i>51.1</i>	<i>6,000</i>	<i>73.2</i>	<i>30,000</i>	<i>54.6</i>
Collision with Fixed Object	700	30.1	7,000	15.6	1,000	6.1	8,000	14.7
Collision with Object Not Fixed:								
Nonmotorist	28	1.2	1,000	1.6	*	*	1,000	1.3
Other	67	2.9	2,000	4.4	*	3.6	2,000	4.2
<i>Subtotal</i>	<i>95</i>	<i>4.1</i>	<i>3,000</i>	<i>6.0</i>	<i>*</i>	<i>3.6</i>	<i>3,000</i>	<i>5.5</i>
Noncollision	328	14.1	12,000	27.3	1,000	17.1	14,000	25.2
Total**	2,324	100.0	45,000	100.0	9,000	100.0	55,000	100.0

* Less than 500 or less than 0.05 percent.

** Includes 4 motorcycles involved in fatal crashes with unknown most harmful event.

Table 50
Motorcycles Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	589	56.4	8,000	35.0	*	12.6	8,000	33.8
Left Side	65	6.2	1,000	5.7	*	*	1,000	5.2
Right Side	81	7.8	1,000	6.7	1,000	23.6	2,000	8.3
Rear	5	0.5	*	0.1	*	*	*	0.1
Noncollision	157	15.0	11,000	52.5	1,000	63.8	13,000	52.0
Other/Unknown	148	14.2	*	*	*	*	*	0.6
Total	1,045	100.0	22,000	100.0	2,000	100.0	25,000	100.0
Multiple-Vehicle Crashes								
Front	954	74.6	13,000	57.9	4,000	63.5	18,000	59.7
Left Side	112	8.8	3,000	14.9	1,000	7.9	4,000	13.2
Right Side	77	6.0	3,000	11.0	1,000	13.8	3,000	11.4
Rear	72	5.6	3,000	13.4	1,000	14.8	4,000	13.3
Noncollision	7	0.5	1,000	2.6	*	*	1,000	2.0
Other/Unknown	57	4.5	*	0.2	*	*	*	0.4
Total	1,279	100.0	23,000	100.0	6,000	100.0	31,000	100.0
All Crashes								
Front	1,543	66.4	21,000	46.8	4,000	49.8	27,000	48.1
Left Side	177	7.6	5,000	10.5	1,000	5.8	5,000	9.6
Right Side	158	6.8	4,000	8.9	1,000	16.4	6,000	10.0
Rear	77	3.3	3,000	7.0	1,000	10.8	4,000	7.4
Noncollision	164	7.1	12,000	26.7	1,000	17.1	14,000	24.4
Other/Unknown	205	8.8	*	0.1	*	*	*	0.5
Total	2,324	100.0	45,000	100.0	9,000	100.0	55,000	100.0

* Less than 500 or less than 0.05 percent.

Table 51
Buses Involved in Crashes by Most Harmful Event and Crash Severity

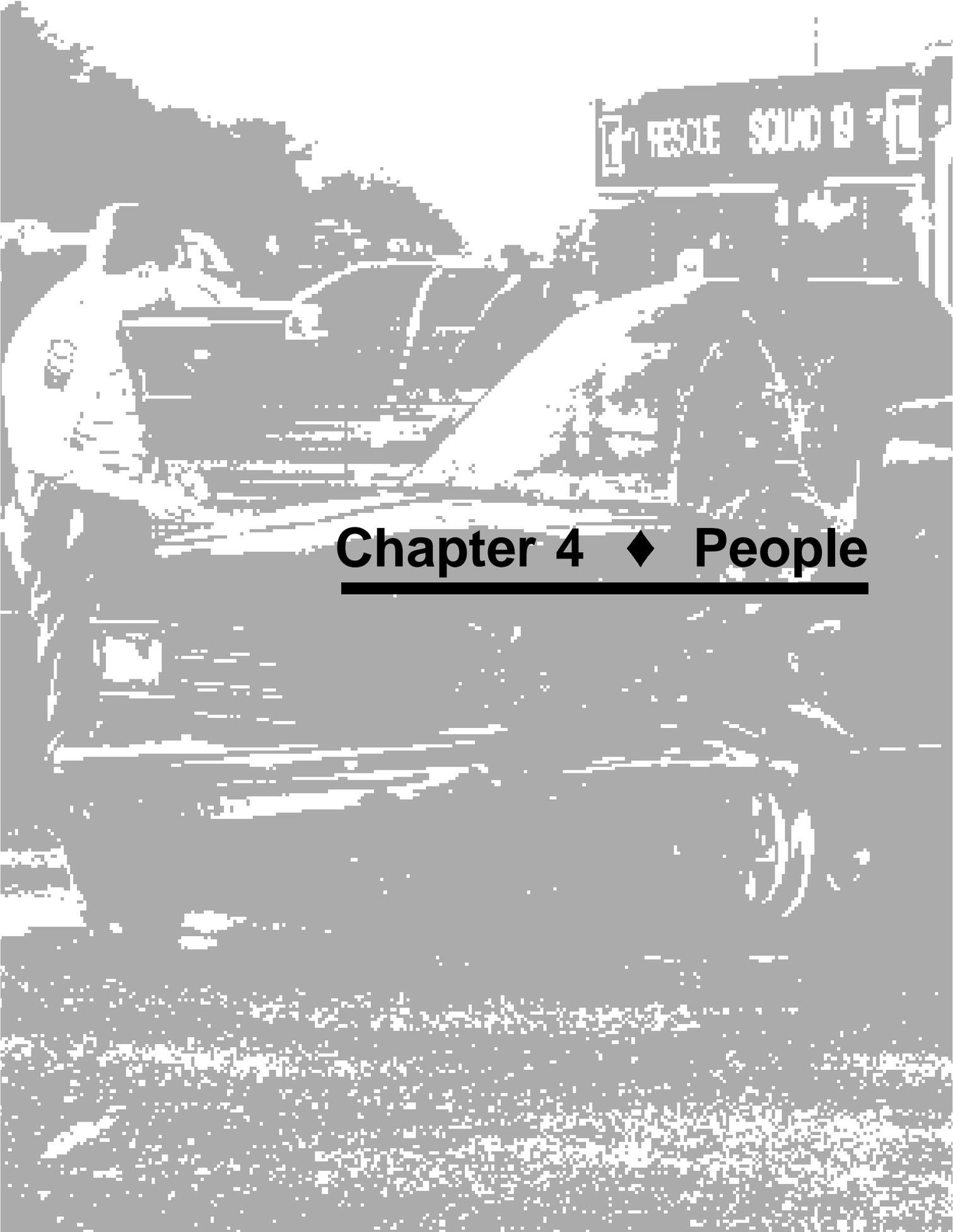
Most Harmful Event	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Collision with Motor Vehicle in Transport by Initial Point of Impact:								
Front	109	38.2	4,000	34.1	6,000	14.2	10,000	19.0
Left Side	23	8.1	3,000	24.0	11,000	26.1	14,000	25.5
Right Side	7	2.5	1,000	10.4	8,000	20.8	10,000	18.2
Rear	36	12.6	2,000	18.2	7,000	18.0	10,000	18.0
Other/Unknown	0	--	*	*	*	0.2	*	0.2
<i>Subtotal</i>	<i>175</i>	<i>61.4</i>	<i>11,000</i>	<i>86.7</i>	<i>32,000</i>	<i>79.3</i>	<i>43,000</i>	<i>80.9</i>
Collision with Fixed Object	<i>1</i>	<i>0.4</i>	<i>*</i>	<i>2.2</i>	<i>2,000</i>	<i>5.3</i>	<i>2,000</i>	<i>4.5</i>
Collision with Object Not Fixed:								
Nonmotorist	97	34.0	1,000	10.5	*	*	1,000	2.7
Other	1	0.4	*	*	6,000	15.2	6,000	11.5
<i>Subtotal</i>	<i>98</i>	<i>34.4</i>	<i>1,000</i>	<i>10.5</i>	<i>6,000</i>	<i>15.2</i>	<i>8,000</i>	<i>14.2</i>
Noncollision	<i>11</i>	<i>3.9</i>	<i>*</i>	<i>0.6</i>	<i>*</i>	<i>0.3</i>	<i>*</i>	<i>0.4</i>
Total	285	100.0	13,000	100.0	40,000	100.0	53,000	100.0

* Less than 500 or less than 0.05 percent.

Table 52
Buses Involved in Crashes by Initial Point of Impact, Crash Severity, and Crash Type

Initial Point of Impact	Crash Severity						Total	
	Fatal		Injury		Property Damage Only			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Single-Vehicle Crashes								
Front	59	55.7	1,000	66.6	2,000	29.8	4,000	36.2
Left Side	4	3.8	*	4.4	1,000	10.2	1,000	9.1
Right Side	15	14.2	*	23.2	4,000	50.2	4,000	45.3
Rear	3	2.8	*	*	1,000	9.8	1,000	8.1
Noncollision	6	5.7	*	4.6	*	*	*	0.8
Other/Unknown	19	17.9	*	1.2	*	*	*	0.4
Total	106	100.0	2,000	100.0	8,000	100.0	10,000	100.0
Multiple-Vehicle Crashes								
Front	111	62.0	4,000	39.0	6,000	17.6	10,000	23.3
Left Side	24	13.4	3,000	28.2	11,000	33.5	14,000	32.0
Right Side	7	3.9	1,000	11.9	8,000	25.9	10,000	22.3
Rear	37	20.7	2,000	20.8	7,000	22.4	10,000	22.0
Noncollision	0	0.0	*	*	*	0.3	*	0.2
Other/Unknown	0	0.0	*	*	*	0.3	*	0.2
Total	179	100.0	11,000	100.0	32,000	100.0	44,000	100.0
All Crashes								
Front	170	59.6	5,000	42.5	8,000	20.0	14,000	25.6
Left Side	28	9.8	3,000	25.2	12,000	28.9	15,000	27.9
Right Side	22	7.7	2,000	13.4	12,000	30.7	14,000	26.4
Rear	40	14.0	2,000	18.2	8,000	19.9	10,000	19.5
Noncollision	6	2.1	*	0.6	*	0.3	*	0.3
Other/Unknown	19	6.7	*	0.2	*	0.2	*	0.2
Total	285	100.0	13,000	100.0	40,000	100.0	53,000	100.0

* Less than 500 or less than 0.05 percent.



Chapter 4 ♦ People



4. PEOPLE

This chapter presents statistics about the **Drivers, Passengers, Pedestrians, and Pedalcyclists** involved in motor vehicle crashes in 1998. The tables and figures are presented in nine groups: all killed or injured persons, crash-involved drivers, occupants (drivers and passengers), alcohol, restraints, motorcycle related, school bus related, pedestrians, and pedalcyclists. Below are some of the statistics you will find in this section:

- A total of 41,471 people lost their lives in motor vehicle crashes in 1998. Another 3.2 million people were injured.
- The majority of persons killed or injured in traffic crashes were drivers (64 percent), followed by passengers (32 percent), pedestrians (2 percent), and pedalcyclists (2 percent).
- Persons 16 to 20 years old had the highest fatality and injury rates per 100,000 population. Children under 5 years old had the lowest fatality rate.
- For every age group, the fatality rate per 100,000 population was lower for females than for males. The injury rate based on population was lower for females than for males for people under 5 years old and for people over 74 years old.
- Thirty-eight percent of the persons who were killed in traffic crashes in 1998 died in alcohol-related crashes. Ten percent of the injured persons received their injuries in alcohol-related crashes.

Table 53
Persons Killed or Injured, by Person Type and Injury Severity

Person Type	Persons Killed	Persons Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
Vehicle Occupants						
Driver	24,729	244,000	540,000	1,264,000	2,048,000	2,072,000
Passenger	10,519	119,000	243,000	652,000	1,014,000	1,024,000
Unknown Occupant	111	*	*	*	*	*
<i>Subtotal</i>	<i>35,359</i>	<i>363,000</i>	<i>783,000</i>	<i>1,915,000</i>	<i>3,061,000</i>	<i>3,097,000</i>
Nonmotorists						
Pedestrian	5,220	16,000	31,000	22,000	69,000	74,000
Pedalcyclist	761	9,000	25,000	20,000	53,000	54,000
Other/Unknown	131	1,000	2,000	5,000	8,000	8,000
<i>Subtotal</i>	<i>6,112</i>	<i>25,000</i>	<i>58,000</i>	<i>47,000</i>	<i>131,000</i>	<i>137,000</i>
Total	41,471	388,000	841,000	1,963,000	3,192,000	3,234,000

* Less than 500.

Table 54
Persons Killed or Injured, by Age and Injury Severity

Age (Years)	Persons Killed	Persons Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
<5	757	10,000	19,000	51,000	80,000	81,000
5-9	796	10,000	32,000	60,000	103,000	104,000
10-15	1,437	24,000	55,000	106,000	185,000	186,000
16-20	5,727	69,000	171,000	315,000	554,000	560,000
21-24	3,769	37,000	83,000	184,000	305,000	308,000
25-34	6,928	77,000	156,000	401,000	634,000	641,000
35-44	6,696	65,000	130,000	338,000	533,000	540,000
45-54	4,785	43,000	85,000	238,000	367,000	372,000
55-64	3,202	23,000	49,000	132,000	203,000	207,000
65-74	3,132	17,000	33,000	83,000	132,000	135,000
>74	4,137	14,000	28,000	55,000	97,000	101,000
Total	*41,471	388,000	841,000	1,963,000	3,192,000	3,234,000

* Includes 105 fatalities of unknown age.

Table 55
Persons Killed or Injured, by Sex and Injury Severity

Sex	Persons Killed	Persons Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
Male	27,584	203,000	453,000	877,000	1,532,000	1,560,000
Female	13,873	186,000	388,000	1,086,000	1,660,000	1,674,000
Total	*41,471	388,000	841,000	1,963,000	3,192,000	3,234,000

* Includes 14 fatalities of unknown sex.

Figure 18
Percent of Persons Killed or Injured, by Age

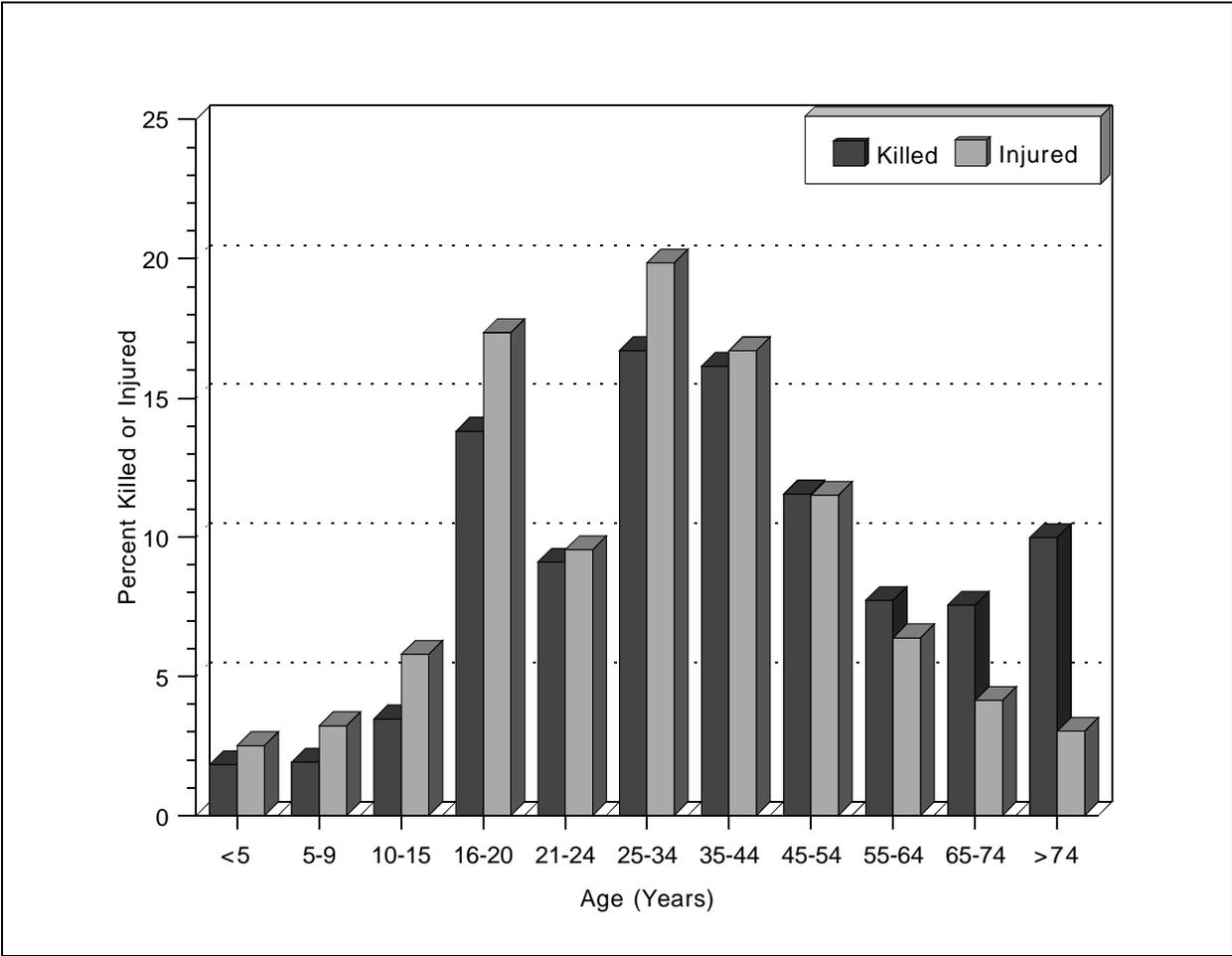


Table 56
Persons Killed or Injured and Fatality and Injury Rates per 100,000 Population by Age and Sex

Age (Years)	Male			Female			Total		
	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate	Killed	Population (Thousands)	Rate
<5	407	9,696	4.20	349	9,270	3.76	757	18,966	3.99
5-9	461	10,195	4.52	333	9,726	3.42	796	19,921	4.00
10-15	862	11,854	7.27	575	11,281	5.10	1,437	23,135	6.21
16-20	3,901	9,983	39.08	1,825	9,445	19.32	5,727	19,429	29.48
21-24	2,884	7,059	40.86	884	6,833	12.94	3,769	13,892	27.13
25-34	5,036	19,254	26.16	1,891	19,521	9.69	6,928	38,774	17.87
35-44	4,591	22,101	20.77	2,104	22,419	9.38	6,696	44,520	15.04
45-54	3,284	16,900	19.43	1,501	17,685	8.49	4,785	34,585	13.84
55-64	2,070	10,806	19.16	1,132	11,870	9.54	3,202	22,676	14.12
65-74	1,764	8,250	21.38	1,368	10,146	13.48	3,132	18,395	17.03
>74	2,250	5,949	37.82	1,887	10,057	18.76	4,137	16,006	25.85
Unknown	74	*	*	24	*	*	105	*	*
Total	27,584	132,046	20.89	13,873	138,252	10.03	**41,471	270,299	15.34

Age (Years)	Male			Female			Total		
	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate	Injured	Population (Thousands)	Rate
<5	43,000	9,696	444	37,000	9,270	400	80,000	18,966	422
5-9	52,000	10,195	507	51,000	9,726	528	103,000	19,921	517
10-15	89,000	11,854	749	96,000	11,281	849	185,000	23,135	798
16-20	276,000	9,983	2,760	278,000	9,445	2,946	554,000	19,429	2,850
21-24	154,000	7,059	2,181	151,000	6,833	2,204	305,000	13,892	2,192
25-34	306,000	19,254	1,588	328,000	19,521	1,681	634,000	38,774	1,635
35-44	250,000	22,101	1,130	283,000	22,419	1,264	533,000	44,520	1,197
45-54	168,000	16,900	992	199,000	17,685	1,128	367,000	34,585	1,061
55-64	97,000	10,806	897	107,000	11,870	897	203,000	22,676	897
65-74	58,000	8,250	704	74,000	10,146	728	132,000	18,395	717
>74	41,000	5,949	690	56,000	10,057	553	97,000	16,006	604
Total	1,532,000	132,046	1,160	1,660,000	138,252	1,201	3,192,000	270,299	1,181

* Not applicable.

** Includes 14 fatalities of unknown sex.

Source: Population Bureau of the Census. Totals may not equal sum of components due to independent rounding.

Figure 19
Fatality and Injury Rates per 100,000 Population, by Age and Sex

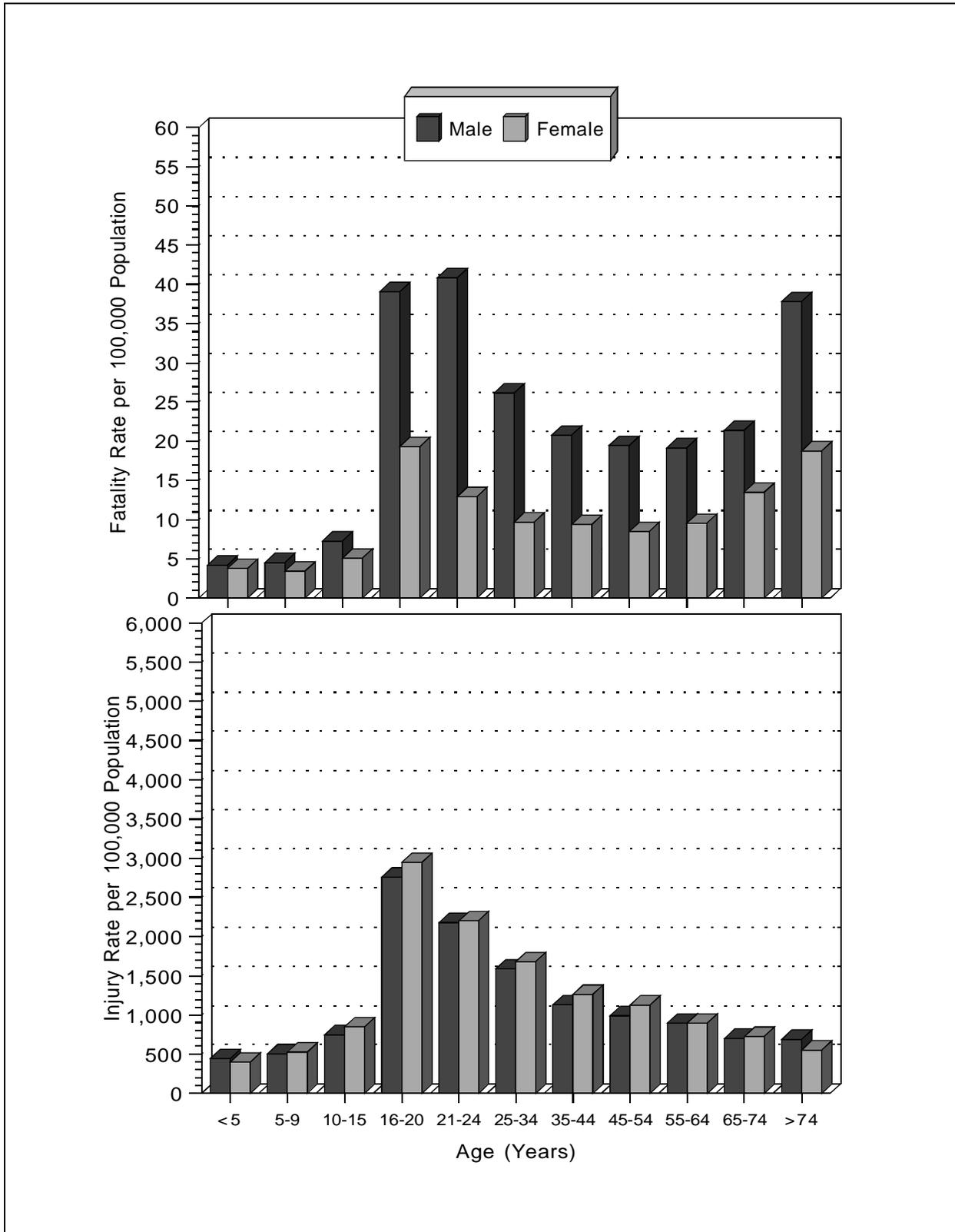


Table 57
Persons Killed or Injured in Crashes by Weather Condition and Light Condition

Weather Condition	Light Condition				Total
	Daylight	Dark, but Lighted	Dark	Dawn or Dusk	
Persons Killed					
Normal	18,528	5,200	10,803	1,512	36,076
Rain	1,804	627	1,028	183	3,644
Snow/Sleet	343	52	246	48	691
Other	250	72	403	72	797
Unknown	52	15	42	1	263
Total*	20,977	5,966	12,522	1,816	41,471
Persons Injured					
Normal	1,945,000	403,000	272,000	89,000	2,709,000
Rain	266,000	84,000	48,000	23,000	420,000
Snow/Sleet	22,000	7,000	9,000	4,000	41,000
Other	10,000	3,000	6,000	2,000	22,000
Total	2,242,000	497,000	334,000	118,000	3,192,000

* Includes 190 fatalities in crashes that occurred under unknown light conditions.

Table 58
Persons Killed or Injured in Crashes by Speed Limit and Crash Type

Speed Limit	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Number	Percent	Number	Percent	Number	Percent
Persons Killed						
30 mph or less	2,909	13.0	1,149	6.0	4,058	9.8
35 or 40 mph	3,875	17.4	2,837	14.8	6,712	16.2
45 or 50 mph	3,545	15.9	3,690	19.3	7,235	17.4
55 mph	6,919	31.0	7,394	38.6	14,313	34.5
60 mph or higher	4,277	19.2	3,783	19.8	8,060	19.4
No Statutory Limit	126	0.6	55	0.3	181	0.4
Unknown	669	3.0	243	1.3	912	2.2
Total	22,320	100.0	19,151	100.0	41,471	100.0
Persons Injured						
30 mph or less	176,000	24.8	500,000	20.1	676,000	21.2
35 or 40 mph	149,000	21.0	953,000	38.4	1,101,000	34.5
45 or 50 mph	101,000	14.3	543,000	21.8	644,000	20.2
55 mph	184,000	26.0	326,000	13.1	510,000	16.0
60 mph or higher	96,000	13.6	161,000	6.5	257,000	8.0
No Statutory Limit	2,000	0.3	1,000	0.1	4,000	0.1
Total	708,000	100.0	2,484,000	100.0	3,192,000	100.0

Table 59
Persons Killed in Crashes by Speed Limit and Land Use

Speed Limit	Land Use						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
30 mph or less	1,012	24.9	2,989	73.7	57	1.4	4,058	100.0
35 or 40 mph	2,044	30.5	4,609	68.7	59	0.9	6,712	100.0
45 or 50 mph	3,731	51.6	3,444	47.6	60	0.8	7,235	100.0
55 mph	11,704	81.8	2,556	17.9	53	0.4	14,313	100.0
60 mph or higher	6,008	74.5	2,037	25.3	15	0.2	8,060	100.0
No Statutory Limit	161	89.0	19	10.5	1	0.6	181	100.0
Unknown	431	47.3	447	49.0	34	3.7	912	100.0
Total	25,091	60.5	16,101	38.8	279	0.7	41,471	100.0

Figure 20
Percent of Fatalities by Speed Limit and Land Use

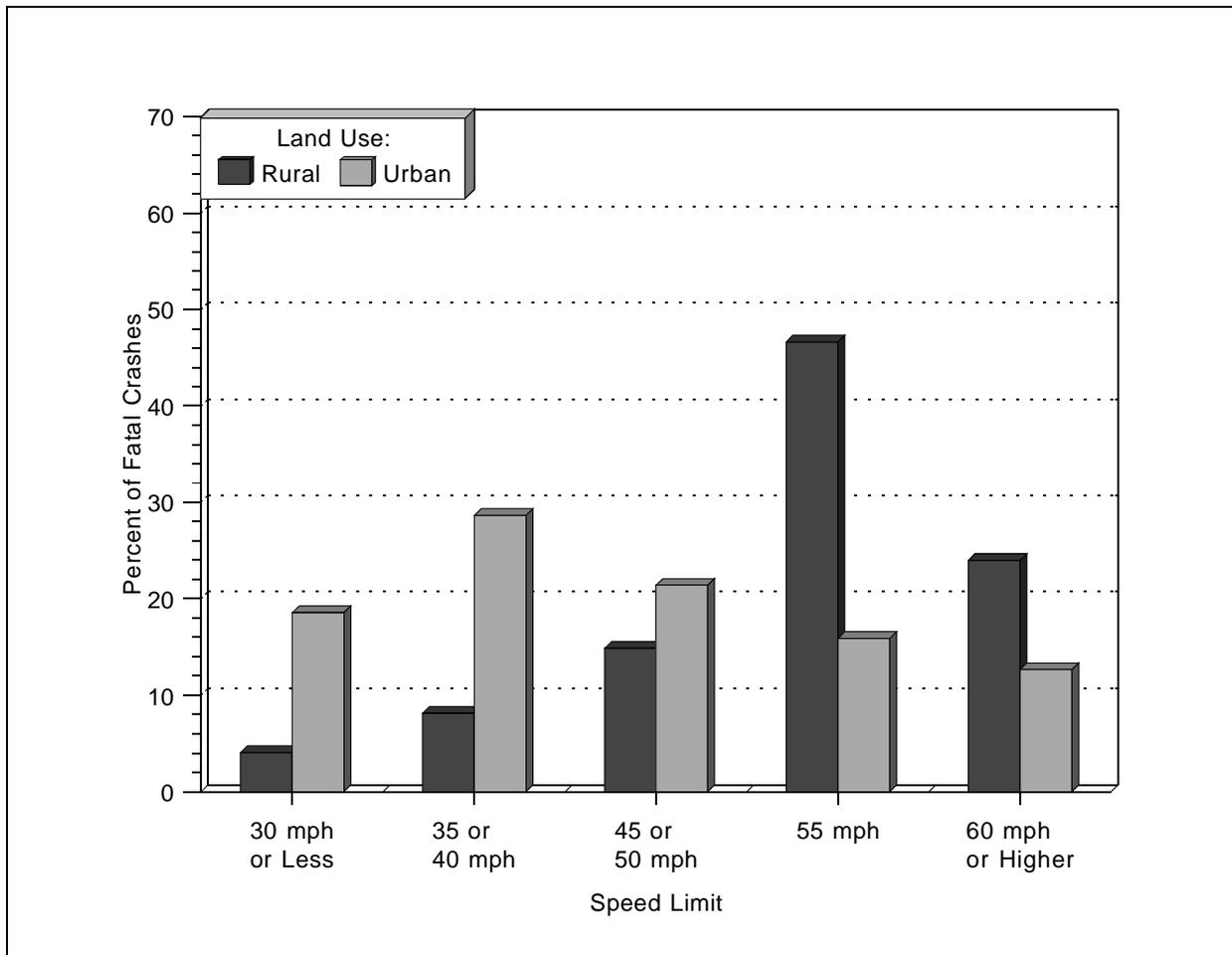


Table 60
Persons Killed or Injured in Crashes and Percent Alcohol Related
by Time of Day and Crash Type

Time of Day	Crash Type						Total		
	Single Vehicle			Multiple Vehicle					
	Number	Alcohol Related	Percent Alcohol Related	Number	Alcohol Related	Percent Alcohol Related	Number	Alcohol Related	Percent Alcohol Related
Persons Killed*									
Midnight to 3 am	3,827	2,954	77	1,245	897	72	5,072	3,851	76
3 am to 6 am	2,235	1,411	63	825	419	51	3,060	1,830	60
6 am to 9 am	1,822	343	19	2,191	238	11	4,013	582	15
9 am to Noon	1,680	247	15	2,544	238	9	4,224	484	11
Noon to 3 pm	2,198	439	20	3,388	425	13	5,586	864	15
3 pm to 6 pm	2,989	853	29	4,023	816	20	7,012	1,669	24
6 pm to 9 pm	3,567	1,784	50	2,887	1,137	39	6,454	2,921	45
9 pm to Midnight	3,665	2,366	65	2,028	1,149	57	5,693	3,516	62
Unknown	337	214	63	20	4	20	357	218	61
Total	22,320	10,612	48	19,151	5,323	28	41,471	15,935	38
Persons Injured**									
Midnight to 3 am	72,000	29,000	40	72,000	25,000	34	144,000	54,000	37
3 am to 6 am	56,000	18,000	33	36,000	8,000	21	91,000	26,000	28
6 am to 9 am	76,000	6,000	8	266,000	6,000	2	342,000	12,000	3
9 am to Noon	70,000	3,000	5	332,000	11,000	3	402,000	14,000	4
Noon to 3 pm	96,000	7,000	7	529,000	14,000	3	626,000	21,000	3
3 pm to 6 pm	125,000	10,000	8	694,000	30,000	4	818,000	40,000	5
6 pm to 9 pm	114,000	22,000	19	358,000	43,000	12	472,000	65,000	14
9 pm to Midnight	100,000	30,000	30	197,000	43,000	22	297,000	73,000	25
Total	708,000	127,000	18	2,484,000	179,000	7	3,192,000	305,000	10

* Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater.

** Police-reported alcohol involvement.

Figure 21
Percent of Persons Killed or Injured in Alcohol-Related Crashes by Time of Day

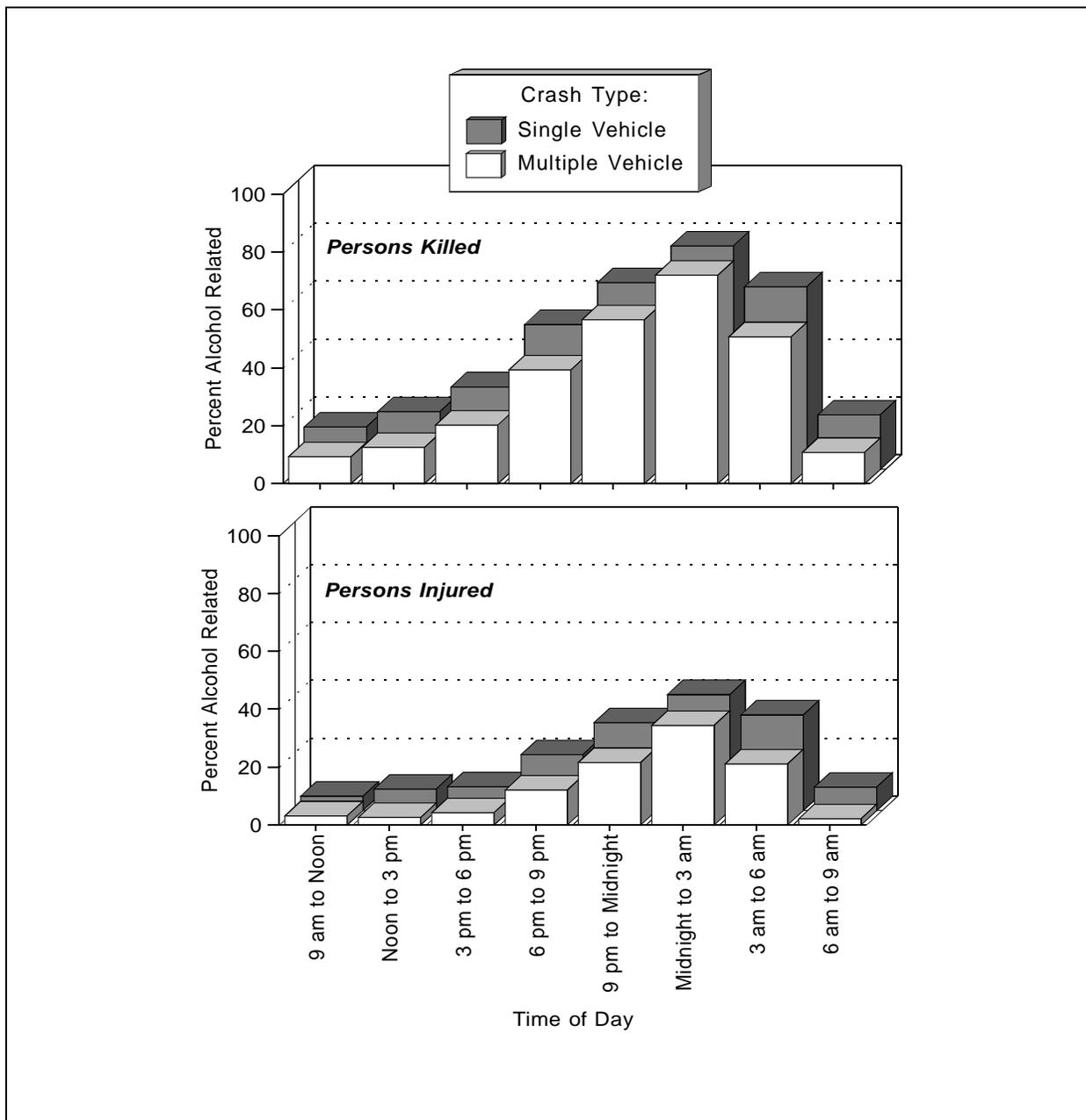


Table 61
Persons Killed in Construction/Maintenance Zones, by Roadway Function Class and Person Type

Roadway Function Class	Person Type					Total
	Driver	Passenger	Pedestrian	Pedalcyclist	Other Nonmotorist	
Principal Arterial						
Interstate	132	74	27	0	2	235
Freeway or Expressway	35	18	7	1	0	61
Other	125	59	27	4	1	216
Minor Arterial	81	22	17	2	0	122
Collector	41	25	8	0	0	74
Local Road or Street	32	8	13	2	0	55
Unknown	5	1	2	1	0	9
Total	451	207	101	10	3	772

Table 62
Persons Killed in Crashes Involving Emergency Vehicles, by Person Type, Crash Type, and Vehicle Type

Person Type	Crash Type				Total	
	Single Vehicle		Multiple Vehicle			
	Total	In Emergency Use*	Total	In Emergency Use*	Total	In Emergency Use*
Ambulance						
Ambulance Driver	0	0	2	2	2	2
Ambulance Passenger	3	2	4	3	7	5
Occupant of Other Vehicle	0	0	17	12	17	12
Pedestrian	1	0	1	1	2	1
Pedalcyclist	0	0	0	0	0	0
Total	4	2	24	18	28	20
Fire Truck						
Fire Truck Driver	4	1	0	0	4	1
Fire Truck Passenger	2	1	1	0	3	1
Occupant of Other Vehicle	0	0	10	7	10	7
Pedestrian	2	1	0	0	2	1
Pedalcyclist	1	1	0	0	1	1
Total	9	4	11	7	20	11
Police Vehicle						
Police Vehicle Driver	8	4	9	2	17	6
Police Vehicle Passenger	1	0	2	2	3	2
Occupant of Other Vehicle	0	0	64	36	64	36
Pedestrian	9	2	1	0	10	2
Pedalcyclist	0	0	0	0	0	0
Total	18	6	76	40	94	46

* Refers to a vehicle traveling with physical emergency signals in use (red lights blinking, sirens sounding, etc.).

Figure 22
Fatality and Injury Rates per 1,000 Crashes by First Harmful Event and Manner of Collision

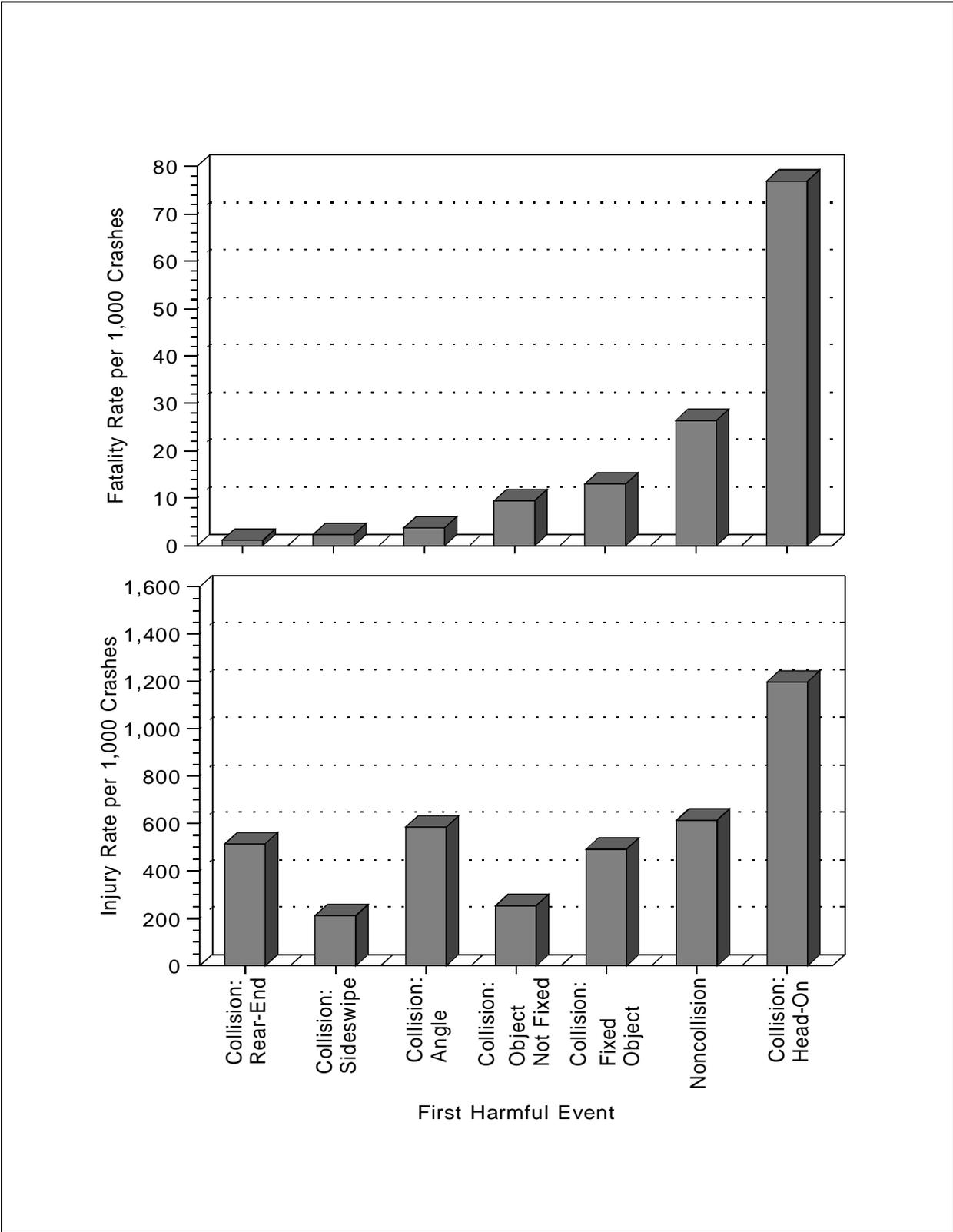


Figure 23
Fatality and Injury Rates per 1,000 Crashes by Time of Day

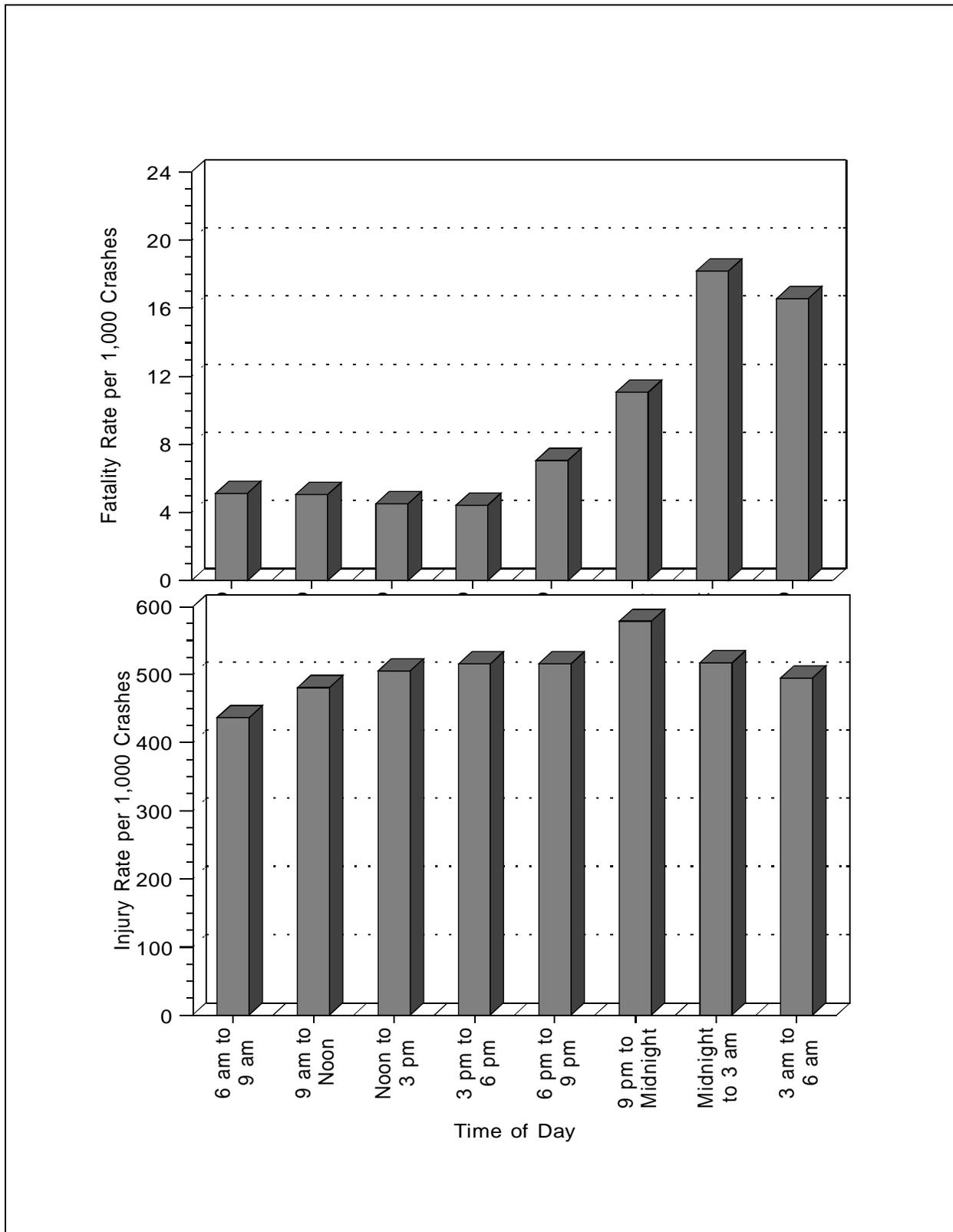


Figure 24
Fatality and Injury Rates per 1,000 Crashes by Speed Limit

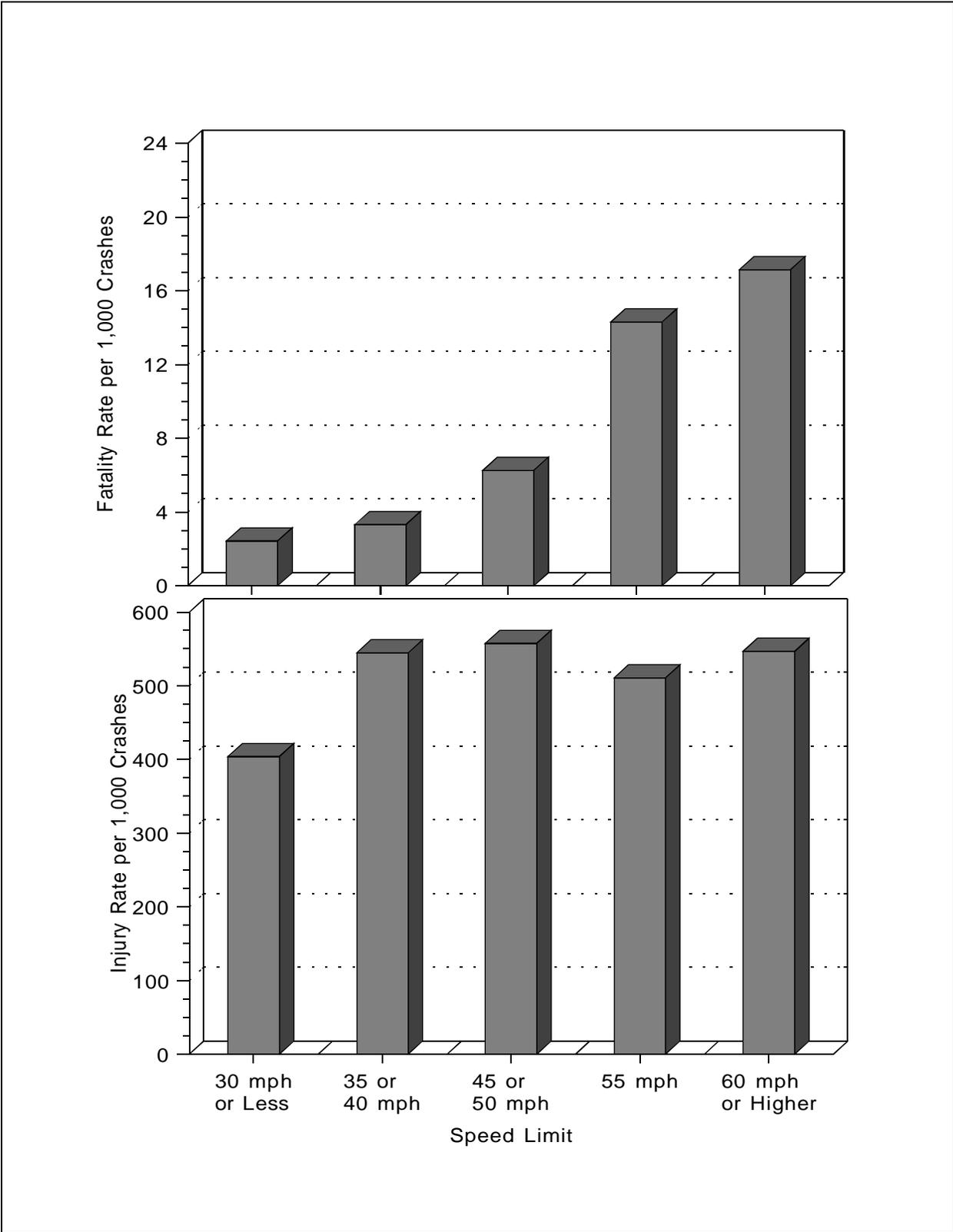


Table 63
Driver Involvement Rates per 100,000 Licensed Drivers by Age, Sex, and Crash Severity, 1997

Age (Years)	Sex				Total	
	Male		Female		Drivers	Involvement Rate
	Drivers	Involvement Rate	Drivers	Involvement Rate		
Drivers in Fatal Crashes						
<16	222	*	123	*	345	*
16-20	5,493	84.39	2,226	36.62	7,719	61.33
21-24	4,364	69.14	1,341	22.36	5,705	46.35
25-34	9,273	48.18	3,179	17.09	12,453	32.90
35-44	8,087	39.24	2,816	13.73	10,904	26.52
45-54	5,594	34.61	1,928	11.98	7,522	23.32
55-64	3,236	31.57	1,158	11.42	4,394	21.55
65-69	1,210	28.71	528	12.46	1,738	20.57
>69	3,337	38.87	1,640	17.94	4,977	28.08
Unknown	138	--	15	--	931	--
Total**	40,954	44.56	14,954	16.47	56,688	31.03
Drivers in Injury Crashes						
<16	12,000	*	7,000	*	19,000	*
16-20	366,000	5,629	283,000	4,664	650,000	5,163
21-24	251,000	3,975	181,000	3,019	432,000	3,509
25-34	558,000	2,897	406,000	2,184	964,000	2,547
35-44	450,000	2,182	339,000	1,651	788,000	1,917
45-54	313,000	1,937	204,000	1,267	517,000	1,603
55-64	162,000	1,581	101,000	992	263,000	1,288
65-69	67,000	1,592	42,000	1,003	110,000	1,297
>69	129,000	1,507	87,000	948	216,000	1,218
Total	2,308,000	2,511	1,650,000	1,817	3,958,000	2,166
Drivers in Property-Damage-Only Crashes						
<16	18,000	*	10,000	*	28,000	*
16-20	765,000	11,757	503,000	8,272	1,268,000	10,074
21-24	507,000	8,040	312,000	5,198	819,000	6,655
25-34	1,125,000	5,843	696,000	3,740	1,820,000	4,810
35-44	937,000	4,545	596,000	2,908	1,533,000	3,728
45-54	733,000	4,536	425,000	2,641	1,158,000	3,590
55-64	330,000	3,218	179,000	1,766	509,000	2,496
65-69	119,000	2,828	69,000	1,619	188,000	2,222
>69	292,000	3,397	188,000	2,055	480,000	2,705
Total	4,826,000	5,251	2,976,000	3,278	7,802,000	4,270
Drivers in All Crashes						
<16	30,000	*	17,000	*	47,000	*
16-20	1,137,000	17,471	788,000	12,972	1,926,000	15,299
21-24	763,000	12,084	494,000	8,239	1,257,000	10,211
25-34	1,692,000	8,789	1,105,000	5,941	2,797,000	7,389
35-44	1,394,000	6,767	938,000	4,573	2,332,000	5,672
45-54	1,052,000	6,507	631,000	3,920	1,683,000	5,216
55-64	495,000	4,831	281,000	2,769	776,000	3,805
65-69	188,000	4,449	112,000	2,634	299,000	3,539
>69	424,000	4,943	276,000	3,021	701,000	3,952
Unknown	***	*	***	*	1,000	*
Total	7,175,000	7,807	4,642,000	5,112	11,817,000	6,468

* Not applicable.

** Includes 780 drivers of unknown sex.

*** Less than 500.

Note: 1998 data for licensed drivers not available at time of publication.

Source: Licensed Drivers—Federal Highway Administration.

Figure 25
Driver Involvement Rates per 100,000 Licensed Drivers by Crash Severity, Age, and Sex, 1997

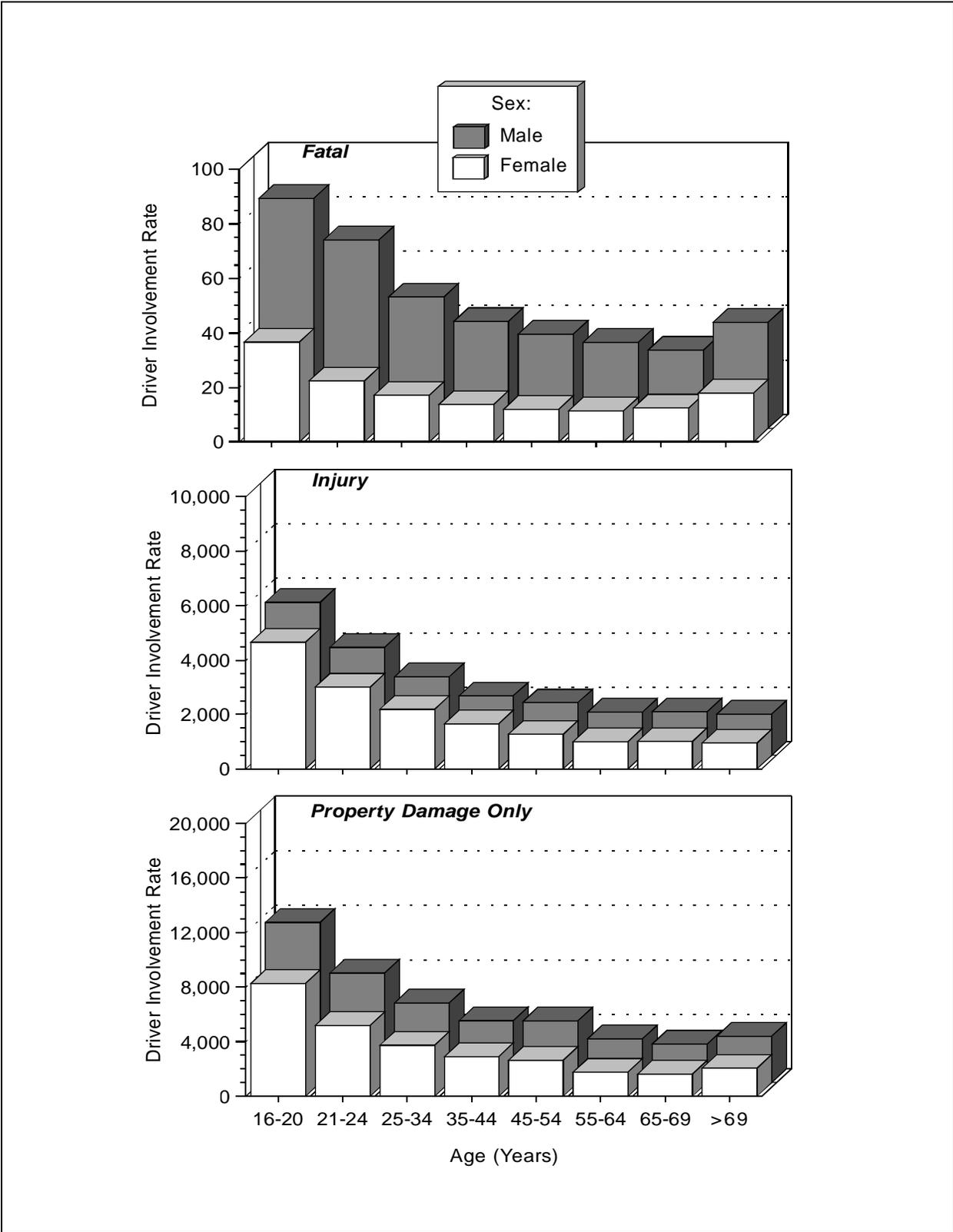


Table 64
Drivers Involved in Fatal Crashes by Previous Driving Record and License Status

Previous Convictions	Valid License (49,046)		Invalid License (6,033)		Total (55,079)	
	Number	Percent	Number	Percent	Number	Percent
Previous Recorded Crashes	7,790	15.9	877	14.5	8,667	15.7
Previous Recorded Suspensions or Revocations	3,548	7.2	2,862	47.4	6,410	11.6
Previous DWI Convictions	950	1.9	892	14.8	1,842	3.3
Previous Speeding Convictions	10,335	21.1	1,134	18.8	11,469	20.8
Previous Other Harmful Moving Convictions	7,968	16.2	1,487	24.6	9,455	17.2
Drivers with No Previous Conviction	29,033	59.2	2,624	43.5	31,657	57.5

Notes: Table does not include 1,464 drivers with unknown license status. FARS records prior driving records (convictions only, not violations) for events occurring within 3 years of the date of the crash. The same driver can have one or more of these convictions.

Table 65
Related Factors for Drivers Involved in Fatal Crashes

Factors	Number	Percent
Failure to keep in proper lane or running off road	16,608	29.4
Driving too fast for conditions or in excess of posted speed limit	11,183	19.8
Failure to yield right of way	5,131	9.1
Inattentive (talking, eating, etc.)	4,092	7.2
Failure to obey traffic signs, signals, or officer	2,934	5.2
Operating vehicle in erratic, reckless, careless, or negligent manner	2,829	5.0
Swerving or avoiding due to wind, slippery surface, vehicle, object, nonmotorist in roadway, etc.	1,963	3.5
Drowsy, asleep, fatigued, ill, or blackout	1,848	3.3
Overcorrecting/oversteering	1,732	3.1
Vision obscured (rain, snow, glare, lights, building, trees, etc.)	1,296	2.3
Driving wrong way on one-way trafficway or on wrong side of road	1,246	2.2
Making improper turn	1,161	2.1
Other factors	8,767	15.5
None reported	21,038	37.2
Unknown	688	1.2
Total Drivers	56,543	100.0

Note: The sum of the numbers and percentages is greater than total drivers as more than one factor may be present for the same driver.

Table 66
Vehicle Occupants Killed or Injured, by Vehicle Type, Person Type, and Injury Severity

Vehicle and Person Type	Occupants Killed	Occupants Injured by Injury Severity			Total Injured	Total Killed or Injured
		Incapacitating	Nonincapacitating	Other		
Passenger Car						
Drivers	14,419	164,000	373,000	941,000	1,478,000	1,493,000
Passengers	6,691	80,000	168,000	475,000	723,000	730,000
Unknown	54	*	*	*	*	*
<i>Total</i>	<i>21,164</i>	<i>243,000</i>	<i>541,000</i>	<i>1,417,000</i>	<i>2,201,000</i>	<i>2,223,000</i>
Light Truck						
Drivers	7,244	63,000	136,000	298,000	497,000	504,000
Passengers	3,365	35,000	69,000	162,000	265,000	269,000
Unknown	38	*	*	*	*	*
<i>Total</i>	<i>10,647</i>	<i>98,000</i>	<i>204,000</i>	<i>460,000</i>	<i>763,000</i>	<i>773,000</i>
Large Truck						
Drivers	625	4,000	8,000	13,000	24,000	25,000
Passengers	101	1,000	1,000	2,000	4,000	5,000
Unknown	2	*	*	*	*	*
<i>Total</i>	<i>728</i>	<i>5,000</i>	<i>9,000</i>	<i>15,000</i>	<i>29,000</i>	<i>29,000</i>
Motorcycle						
Operators	2,080	12,000	22,000	9,000	43,000	45,000
Passengers	202	2,000	3,000	1,000	6,000	7,000
Unknown	2	*	*	*	*	*
<i>Total</i>	<i>2,284</i>	<i>14,000</i>	<i>25,000</i>	<i>10,000</i>	<i>49,000</i>	<i>51,000</i>
Bus	36	1,000	2,000	13,000	16,000	16,000
Other/Unknown	500	2,000	1,000	1,000	4,000	5,000
Total	35,359	363,000	783,000	1,915,000	3,061,000	3,097,000

* Not applicable.

Table 67
Vehicle Occupants Killed or Injured, by Sex and Vehicle Type

Sex	Vehicle Type						Total
	Passenger Cars	Light Trucks	Large Trucks	Motorcycles	Buses	Other/ Unknown	
Occupants Killed							
Male	12,235	7,880	682	2,079	20	386	23,282
Female	8,922	2,766	46	205	16	110	12,065
Unknown	7	1	0	0	0	4	12
Total	21,164	10,647	728	2,284	36	500	35,359
Occupants Injured							
Male	911,000	455,000	27,000	41,000	7,000	3,000	1,443,000
Female	1,290,000	308,000	2,000	8,000	9,000	1,000	1,618,000
Total	2,201,000	763,000	29,000	49,000	16,000	4,000	3,061,000

Table 68
Vehicle Occupants Killed or Injured, by Age and Vehicle Type

Age (Years)	Vehicle Type						Total
	Passenger Cars	Light Trucks	Large Trucks	Motorcycles	Buses	Other/Unknown	
Occupants Killed							
<5	396	169	2	0	0	8	575
5-9	297	191	7	4	2	13	514
10-15	588	368	4	33	1	69	1,063
16-20	3,582	1,485	14	216	1	64	5,362
21-24	2,149	932	44	306	1	44	3,476
25-34	3,330	1,894	142	678	4	77	6,125
35-44	2,728	2,032	191	582	5	67	5,605
45-54	2,020	1,419	165	302	3	45	3,954
55-64	1,440	887	119	115	10	42	2,613
65-74	1,849	676	34	30	5	36	2,630
>74	2,755	581	6	17	4	31	3,394
Unknown	30	13	0	1	0	4	48
Total	21,164	10,647	728	2,284	36	500	35,359
Occupants Injured							
<5	55,000	21,000	*	*	1,000	*	76,000
5-9	57,000	29,000	*	*	1,000	*	88,000
10-15	105,000	44,000	*	2,000	4,000	2,000	157,000
16-20	425,000	107,000	1,000	6,000	1,000	*	540,000
21-24	228,000	59,000	2,000	5,000	*	*	295,000
25-34	434,000	158,000	7,000	12,000	2,000	1,000	615,000
35-44	332,000	161,000	9,000	12,000	2,000	*	515,000
45-54	240,000	99,000	5,000	8,000	2,000	1,000	356,000
55-64	139,000	50,000	4,000	3,000	1,000	*	198,000
65-74	101,000	26,000	1,000	1,000	*	*	128,000
>74	84,000	10,000	*	*	*	*	94,000
Total	2,201,000	763,000	29,000	49,000	16,000	4,000	3,061,000

* Less than 500.

Table 69
Vehicle Occupants Killed or Injured, by Age, Person Type, and Sex

Age (Years)	Person Type											
	Drivers						Passengers					
	Sex				Total		Sex				Total	
	Male		Female				Male		Female			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed												
<5	0	--	0	--	0	--	297	51.7	277	48.2	575	100.0
5-9	8	72.7	3	27.3	11	100.0	263	52.3	238	47.3	503	100.0
10-15	138	77.1	41	22.9	179	100.0	462	52.3	422	47.7	884	100.0
16-20	2,403	72.2	923	27.8	3,326	100.0	1,228	60.3	807	39.6	2,036	100.0
21-24	1,971	80.4	480	19.6	2,451	100.0	685	66.8	339	33.1	1,025	100.0
25-34	3,591	75.3	1,180	24.7	4,771	100.0	823	60.8	530	39.1	1,354	100.0
35-44	3,283	72.3	1,257	27.7	4,541	100.0	516	48.5	548	51.5	1,064	100.0
45-54	2,344	73.0	867	27.0	3,211	100.0	318	42.8	425	57.2	743	100.0
55-64	1,446	70.8	597	29.2	2,043	100.0	196	34.4	374	65.6	570	100.0
65-74	1,260	67.0	622	33.0	1,882	100.0	195	26.1	553	73.9	748	100.0
>74	1,526	66.3	775	33.7	2,301	100.0	301	27.5	792	72.5	1,093	100.0
Unknown	10	76.9	0	--	13	100.0	18	51.4	15	42.9	35	100.0
Total*	17,980	72.7	6,745	27.3	24,729	100.0	5,302	49.9	5,320	50.0	10,630	100.0
Occupants Injured												
<5	*	*	*	*	*	*	41,000	53.6	35,000	46.4	76,000	100.0
5-9	*	*	*	*	*	*	41,000	46.9	46,000	53.1	87,000	100.0
10-15	6,000	59.9	4,000	40.1	11,000	100.0	62,000	42.6	84,000	57.4	146,000	100.0
16-20	176,000	51.5	166,000	48.5	342,000	100.0	90,000	45.4	108,000	54.6	199,000	100.0
21-24	109,000	51.9	101,000	48.1	211,000	100.0	38,000	45.4	46,000	54.6	84,000	100.0
25-34	234,000	48.8	245,000	51.2	478,000	100.0	59,000	43.0	78,000	57.0	136,000	100.0
35-44	200,000	48.3	214,000	51.7	414,000	100.0	38,000	37.4	63,000	62.6	101,000	100.0
45-54	140,000	49.4	143,000	50.6	283,000	100.0	20,000	27.9	53,000	72.1	73,000	100.0
55-64	83,000	54.8	68,000	45.2	151,000	100.0	11,000	22.5	36,000	77.5	47,000	100.0
65-74	49,000	54.4	41,000	45.6	90,000	100.0	7,000	17.6	31,000	82.6	38,000	100.0
>74	33,000	49.6	34,000	50.4	68,000	100.0	6,000	22.8	20,000	77.2	26,000	100.0
Total	1,031,000	50.3	1,017,000	49.7	2,048,000	100.0	413,000	40.7	601,000	59.3	1,014,000	100.0

* Less than 500 or less than 0.05 percent.

Table 70
Vehicle Occupants Killed or Injured, by Vehicle Type and Most Harmful Event

Vehicle Type	Most Harmful Event								Total	
	Collision with						Noncollision			
	Motor Vehicle in Transport		Object Not Fixed		Fixed Object					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed										
Passenger Car	11,821	55.9	538	2.5	5,206	24.6	3,593	17.0	21,164	100.0
Light Truck	3,880	36.4	282	2.6	2,210	20.8	4,272	40.1	10,647	100.0
Large Truck	166	22.8	32	4.4	154	21.2	376	51.6	728	100.0
Motorcycle	1,175	51.4	68	3.0	710	31.1	328	14.4	2,284	100.0
Bus	8	22.2	7	19.4	2	5.6	19	52.8	36	100.0
Other/Unknown	203	40.6	16	3.2	121	24.2	144	28.8	500	100.0
Total*	17,253	48.8	943	2.7	8,403	23.8	8,732	24.7	35,359	100.0
Occupants Injured										
Passenger Car	1,818,000	82.6	44,000	2.0	284,000	12.9	55,000	2.5	2,201,000	100.0
Light Truck	579,000	75.9	18,000	2.4	113,000	14.8	53,000	6.9	763,000	100.0
Large Truck	13,000	46.8	1,000	5.1	4,000	15.5	9,000	32.6	29,000	100.0
Motorcycle	24,000	49.9	2,000	5.0	8,000	16.1	14,000	28.9	49,000	100.0
Bus	14,000	93.0	**	0.1	1,000	6.2	**	0.7	16,000	100.0
Other/Unknown	3,000	63.9	**	4.4	**	10.0	1,000	21.6	4,000	100.0
Total	2,452,000	80.1	66,000	2.2	410,000	13.4	132,000	4.3	3,061,000	100.0

* Includes 28 fatalities with unknown most harmful event.

** Less than 500.

Table 71
Vehicle Occupants Killed or Injured, by Initial Point of Impact and Vehicle Type

Initial Point of Impact	Vehicle Type						Total
	Passenger Cars	Light Trucks	Large Trucks	Motorcycles	Buses	Other/Unknown	
Occupants Killed							
Front	11,095	5,668	405	1,525	14	198	18,905
Left Side	3,712	1,017	51	173	3	37	4,993
Right Side	3,343	926	55	153	2	30	4,509
Rear	1,024	509	22	67	1	43	1,666
Other*	468	283	20	55	0	11	837
Noncollision	1,108	1,947	142	161	14	87	3,459
Unknown	414	297	33	150	2	94	990
Total	21,164	10,647	728	2,284	36	500	35,359
Occupants Injured							
Front	971,000	326,000	10,000	23,000	5,000	1,000	1,334,000
Left Side	355,000	104,000	6,000	5,000	6,000	1,000	477,000
Right Side	319,000	106,000	4,000	4,000	1,000	**	435,000
Rear	512,000	185,000	2,000	3,000	4,000	1,000	708,000
Other*	9,000	3,000	**	**	**	**	12,000
Noncollision	36,000	38,000	7,000	14,000	**	1,000	95,000
Total	2,201,000	763,000	29,000	49,000	16,000	4,000	3,061,000

* Includes top, undercarriage, override, and underride.

** Less than 500.

Table 72
Vehicle Occupants Killed or Injured, by Vehicle Type and Ejection

Vehicle Type	Ejected*		Not Ejected		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed								
Passenger Car	4,193	19.8	16,891	79.8	80	0.4	21,164	100.0
Light Truck	4,388	41.2	6,178	58.0	81	0.8	10,647	100.0
Large Truck	218	29.9	507	69.6	3	0.4	728	100.0
Bus	11	30.6	25	69.4	0	--	36	100.0
Other/Unknown	168	33.6	253	50.6	79	15.8	500	100.0
Total**	8,978	27.1	23,854	72.1	243	0.7	33,075	100.0
Occupants Injured								
Passenger Car	7,000	0.3	2,194,000	99.7	***	***	2,201,000	100.0
Light Truck	8,000	1.1	754,000	98.9	***	***	763,000	100.0
Large Truck	***	1.3	28,000	98.7	***	***	29,000	100.0
Bus	***	***	16,000	100.0	***	***	16,000	100.0
Other/Unknown	***	0.5	4,000	99.5	***	***	4,000	100.0
Total**	16,000	0.5	2,997,000	99.5	***	***	3,012,000	100.0

* Includes total and partial ejection.

** Excludes motorcycle occupants.

*** Less than 500 or less than 0.05 percent.

Table 73
Occupants Killed or Injured in Two-Vehicle Crashes, by Vehicle Types Involved

Vehicles Types Involved				Total Occupants Killed
Vehicle Type	Occupants Killed	Vehicle Type	Occupants Killed	
Passenger Car	--	Passenger Car	--	3,804
Passenger Car	4,420	Light Truck	1,083	5,503
Passenger Car	2,062	Large Truck	34	2,096
Passenger Car	10	Motorcycle	510	520
Passenger Car	102	Bus	0	102
Passenger Car	94	Other/Unknown	48	142
Light Truck	--	Light Truck	--	1,422
Light Truck	1,158	Large Truck	29	1,187
Light Truck	2	Motorcycle	437	439
Light Truck	38	Bus	2	40
Light Truck	52	Other/Unknown	62	114
Large Truck	--	Large Truck	--	105
Large Truck	0	Motorcycle	85	85
Large Truck	2	Bus	7	9
Large Truck	0	Other/Unknown	34	34
Motorcycle	--	Motorcycle	--	50
Motorcycle	8	Bus	0	8
Motorcycle	10	Other/Unknown	3	13
Bus	0	Other/Unknown	4	4
Other/Unknown	--	Other/Unknown	--	47
Total Occupants Killed				15,724

Vehicles Types Involved				Total Occupants Injured
Vehicle Type	Occupants Injured	Vehicle Type	Occupants Injured	
Passenger Car	--	Passenger Car	--	1,003,000
Passenger Car	464,000	Light Truck	294,000	758,000
Passenger Car	50,000	Large Truck	6,000	56,000
Passenger Car	1,000	Motorcycle	15,000	16,000
Passenger Car	7,000	Bus	5,000	12,000
Passenger Car	3,000	Other/Unknown	1,000	5,000
Light Truck	--	Light Truck	--	168,000
Light Truck	17,000	Large Truck	3,000	20,000
Light Truck	1,000	Motorcycle	7,000	8,000
Light Truck	1,000	Bus	3,000	4,000
Light Truck	1,000	Other/Unknown	1,000	2,000
Large Truck	--	Large Truck	--	2,000
Total Occupants Injured				2,055,000

Table 74
Occupants Involved in Fatal Crashes and Occupant Fatalities, by Vehicle Body Type

Body Type	Occupants Involved		Occupants Killed		Body Type	Occupants Involved		Occupants Killed	
	No.	%	No.	%		No.	%	No.	%
Passenger Cars	49,198	52.3	21,164	59.9	Large Trucks	5,805	6.2	728	2.1
Convertible	458	0.5	213	0.6	Step Van	29	*	2	*
2 Door Sedan, Hardtop, Coupe	13,917	14.8	6,210	17.6	Single Unit Truck (10,000 lb < GVWR ≤ 19,500 lb)	273	0.3	38	0.1
3 Door/2 Door Hatchback	3,217	3.4	1,540	4.4	Single Unit Truck (19,500 lb < GVWR ≤ 26,000 lb)	357	0.4	43	0.1
4 Door Sedan Hardtop	27,844	29.6	11,610	32.8	Single Unit Heavy Truck (GVWR > 26,000 lb)	1,009	1.1	127	0.4
5 Door/4 Door Hatchback	840	0.9	396	1.1	Single Unit Truck, Unknown GVWR	60	0.1	7	*
Station Wagon	1,844	2.0	787	2.2	Truck Tractor	4,032	4.3	499	1.4
Hatchback, Doors Unknown	78	0.1	40	0.1	Unknown Medium Truck (10,000 lb < GVWR ≤ 26,000 lb)	5	*	1	*
Other Auto	178	0.2	60	0.2	Unknown Heavy Truck (GVWR > 26,000 lb)	11	*	1	*
Unknown Auto	726	0.8	260	0.7	Unknown Large Truck Type	28	*	9	*
Auto-Based Pickup	96	0.1	48	0.1	Unknown Truck	1	*	1	*
Light Trucks	33,992	36.1	10,647	30.1	Motorcycles	2,701	2.9	2,284	6.5
Compact Utility	6,413	6.8	2,147	6.1	Motorcycle	2,578	2.7	2,177	6.2
Large Utility	1,306	1.4	370	1.0	Moped	35	*	32	0.1
Utility Station Wagon	817	0.9	176	0.5	Three Wheel Motorcycle or Moped	2	*	2	*
Utility, Unknown Body Type	24	*	8	*	Off-Road Motorcycle (Two Wheel)	47	*	40	0.1
Minivan	5,236	5.6	1,325	3.7	Other Motorcycle/Minibike	33	*	29	0.1
Large Van	3,251	3.5	643	1.8	Unknown Motorcycle	6	*	4	*
Step Van	109	0.1	17	*	Buses**	948	1.0	36	0.1
Van-Based School Bus	11	*	2	*	School Bus	303	0.3	4	*
Van-Based Transit Bus	6	*	0	--	Cross Country/Intercity Bus	327	0.3	13	*
Other Van Type	26	*	9	*	Transit Bus	210	0.2	2	*
Unknown Van Type	118	0.1	19	0.1	Other Bus	99	0.1	15	*
Compact Pickup	6,297	6.7	2,642	7.5	Unknown Bus	9	*	2	*
Standard Pickup	9,978	10.6	3,178	9.0	Other Vehicles	700	0.7	343	1.0
Pickup with Camper	69	0.1	24	0.1	Large Limousine	13	*	3	*
Convertible Pickup	2	*	2	*	Van-Based Motorhome	80	0.1	18	0.1
Unknown Pickup Style Truck	185	0.2	54	0.2	Light Truck-Based Motorhome	5	*	1	*
Cab Chassis-Based Light Truck	117	0.1	27	0.1	Large Truck-Based Motorhome	71	0.1	16	*
Truck-Based Panel	3	*	0	--	Unknown Truck Camper/Motorhome	86	0.1	19	0.1
Unknown Light Truck (not pickup)	6	*	2	*	All Terrain Vehicle	210	0.2	150	0.4
Unknown Light Vehicle Type	12	*	2	*	Snowmobile	53	0.1	42	0.1
Unknown Truck	6	*	0	--	Farm Equipment Except Trucks	95	0.1	50	0.1
					Construction Equipment Except Trucks	24	*	8	*
					Other Vehicle	63	0.1	36	0.1
					Unknown Body Type	783	0.8	157	0.4
					Total	94,127	100.0	35,359	100.0

* Less than 0.05 percent.

** Noninjured passengers are not included in this bus occupant count. All bus drivers are included, regardless of injury severity.

Table 75
Passenger Car Occupants Involved in Fatal Crashes and Occupants Killed,
by Car Wheelbase Size

Passenger Car Wheelbase Size	Occupants Involved in Fatal Crashes		Occupants Killed		Percent of Occupants Killed by Car Wheelbase Size
	Number	Percent of Total	Number	Percent of Total	
Minicompact (under 95 inches)	2,920	5.9	1,488	7.0	51.0
Subcompact (95 to 99 inches)	8,630	17.5	4,022	19.0	46.6
Compact (100 to 104 inches)	16,087	32.7	7,002	33.1	43.5
Intermediate (105 to 109 inches)	11,507	23.4	4,788	22.6	41.6
Full Size (110 to 114 inches)	5,858	11.9	2,290	10.8	39.1
Largest Size (115 inches and over)	2,911	5.9	1,098	5.2	37.7
Unknown	1,285	2.6	476	2.2	37.0
Total	49,198	100.0	21,164	100.0	43.0

Table 76
Persons Killed or Injured in Alcohol-Related Crashes, by Person Type and Injury Severity

Person Type	Persons Killed*	Persons Injured by Injury Severity**			Total Injured
		Incapacitating	Nonincapacitating	Other	
Vehicle Occupants					
Driver	9,603	37,000	69,000	86,000	193,000
Passenger	3,565	19,000	30,000	50,000	99,000
Unknown Occupant	43	***	***	***	***
<i>Subtotal</i>	<i>13,211</i>	<i>56,000</i>	<i>99,000</i>	<i>136,000</i>	<i>292,000</i>
Nonmotorists					
Pedestrian	2,416	3,000	4,000	2,000	9,000
Pedalcyclist	261	1,000	1,000	1,000	3,000
Other	46	***	***	2,000	2,000
<i>Subtotal</i>	<i>2,723</i>	<i>4,000</i>	<i>5,000</i>	<i>5,000</i>	<i>14,000</i>
Total	15,934	60,000	104,000	141,000	305,000

* Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater in the crash. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

** Police-reported alcohol involvement in the crash.

*** Less than 500.

Table 77
Drivers Involved in Crashes by Age, Alcohol Involvement, and Crash Severity

Age (Years)	Alcohol Involvement				Total	
	Yes		No		Number	Percent
	Number	Percent	Number	Percent		

Drivers in Fatal Crashes*

<16	34	9	327	91	361	100
16-20	1,669	22	6,086	78	7,755	100
21-24	2,025	36	3,574	64	5,599	100
25-34	3,635	31	8,260	69	11,895	100
35-44	2,960	26	8,260	74	11,220	100
45-54	1,498	20	6,182	80	7,680	100
55-64	569	13	3,902	87	4,471	100
65-74	309	9	3,086	91	3,395	100
>74	175	5	3,110	95	3,285	100
Unknown	311	35	571	65	882	100
Total	13,185	23	43,358	77	56,543	100

Drivers in Injury Crashes**

<16	***	1	17,000	99	17,000	100
16-20	21,000	3	589,000	97	611,000	100
21-24	29,000	8	351,000	92	380,000	100
25-34	56,000	6	825,000	94	881,000	100
35-44	47,000	6	728,000	94	775,000	100
45-54	21,000	4	486,000	96	507,000	100
55-64	11,000	4	269,000	96	280,000	100
65-74	3,000	1	173,000	99	175,000	100
>74	1,000	1	125,000	99	126,000	100
Total	189,000	5	3,562,000	95	3,751,000	100

Drivers in Property-Damage-Only Crashes**

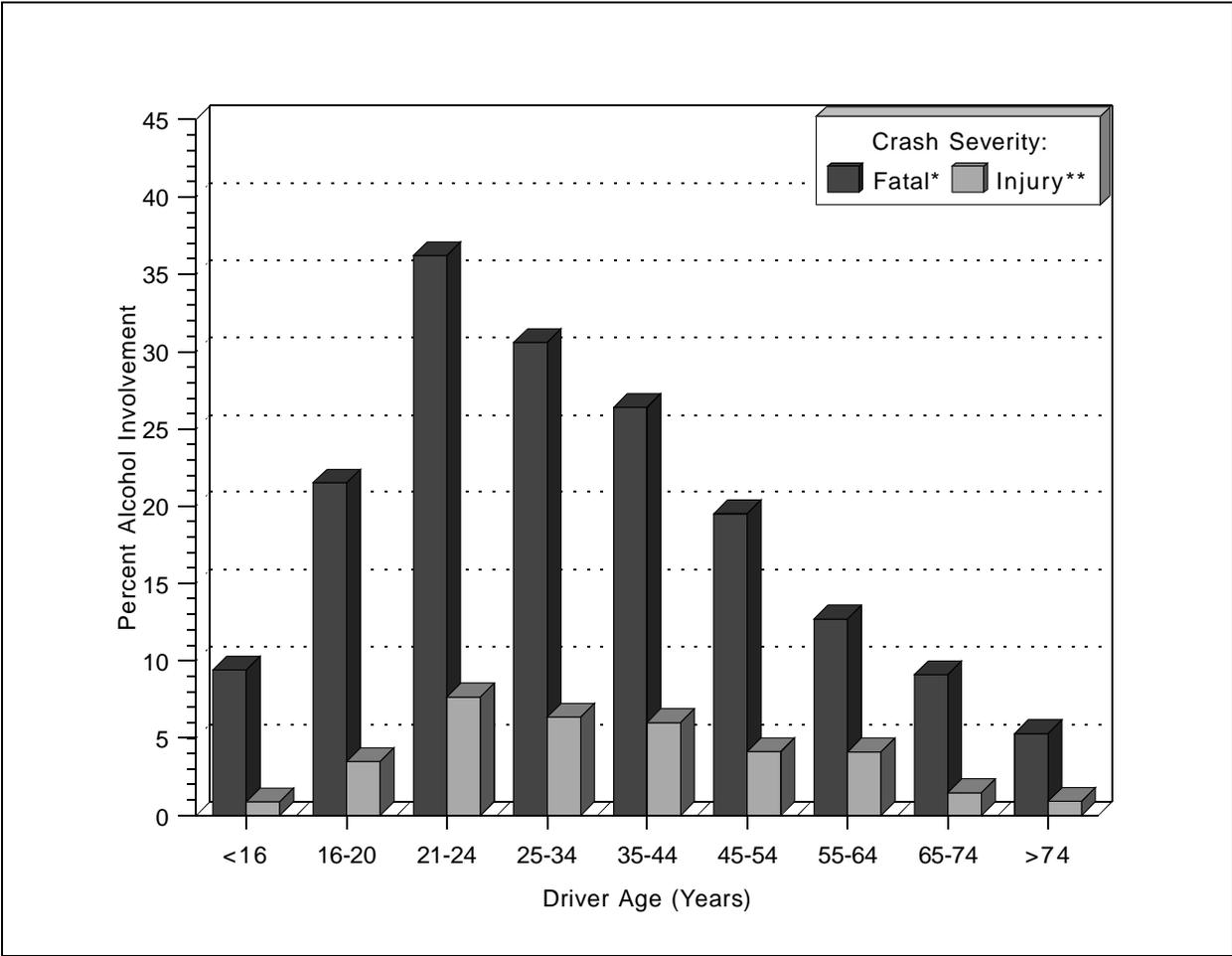
<16	1,000	2	23,000	98	23,000	100
16-20	21,000	2	1,136,000	98	1,157,000	100
21-24	29,000	4	752,000	96	781,000	100
25-34	85,000	5	1,762,000	95	1,847,000	100
35-44	40,000	3	1,465,000	97	1,505,000	100
45-54	21,000	2	1,001,000	98	1,023,000	100
55-64	32,000	5	617,000	95	649,000	100
65-74	4,000	1	339,000	99	343,000	100
>74	2,000	1	232,000	99	233,000	100
Total	234,000	3	7,325,000	97	7,560,000	100

* Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

** Police-reported alcohol involvement.

*** Less than 500.

Figure 26
Percent of Driver Alcohol Involvement for Fatal and Injury Crashes



* For fatal crashes, alcohol involvement is a blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater.

** For injury crashes, alcohol involvement is police-reported alcohol involvement.

Table 78
Drivers Killed or Injured, by Time of Day, Day of Week, Age, Alcohol Involvement,
and Crash Type

Time of Day and Day of Week	Killed*				Injured**			
	Under 21		21 and Older		Under 21		21 and Older	
	Number Killed	Percent with Alcohol Involvement	Number Killed	Percent with Alcohol Involvement	Number Injured	Percent with Alcohol Involvement	Number Injured	Percent with Alcohol Involvement
Single-Vehicle Crashes								
Daytime	709	12	3,927	27	48,000	3	159,000	9
Weekday	452	7	2,656	22	33,000	2	116,000	8
Weekend	257	20	1,271	36	15,000	7	43,000	12
Nighttime	1,295	52	5,658	72	58,000	20	144,000	36
Weekday	561	46	2,546	66	27,000	14	71,000	30
Weekend	734	57	3,111	77	31,000	24	73,000	41
Multiple-Vehicle Crashes								
Daytime	882	6	7,534	10	175,000	***	1,060,000	1
Weekday	675	6	5,813	9	143,000	***	865,000	1
Weekend	207	8	1,721	15	32,000	1	195,000	2
Nighttime	603	23	3,841	40	73,000	3	332,000	8
Weekday	279	21	1,893	34	37,000	2	182,000	6
Weekend	324	25	1,948	47	35,000	4	150,000	11

* Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

** Police-reported alcohol involvement.

*** Less than 0.5 percent.

Table 79
Drivers Killed in Crashes, by Age and Driver's Blood Alcohol Concentration (BAC)

Age (Years)	Driver's BAC								Total	
	0.00		0.01-0.09		0.10 or Higher		0.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<16	170	90	8	4	12	6	20	10	190	100
16-20	2,368	71	257	8	700	21	958	29	3,326	100
21-24	1,185	48	215	9	1,051	43	1,266	52	2,451	100
25-34	2,444	51	372	8	1,955	41	2,327	49	4,771	100
35-44	2,479	55	301	7	1,761	39	2,062	45	4,541	100
45-54	2,111	66	185	6	915	28	1,100	34	3,211	100
55-64	1,605	79	95	5	342	17	438	21	2,043	100
65-74	1,642	87	59	3	181	10	240	13	1,882	100
>74	2,155	94	59	3	87	4	146	6	2,301	100
Unknown	6	48	1	5	6	47	7	52	13	100
Total	16,166	65	1,553	6	7,010	28	8,563	35	24,729	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Figure 27
Alcohol Involvement (BAC ≥ 0.01) for Drivers Killed, by Driver Age, Crash Type, Time of Day, and Day of Week

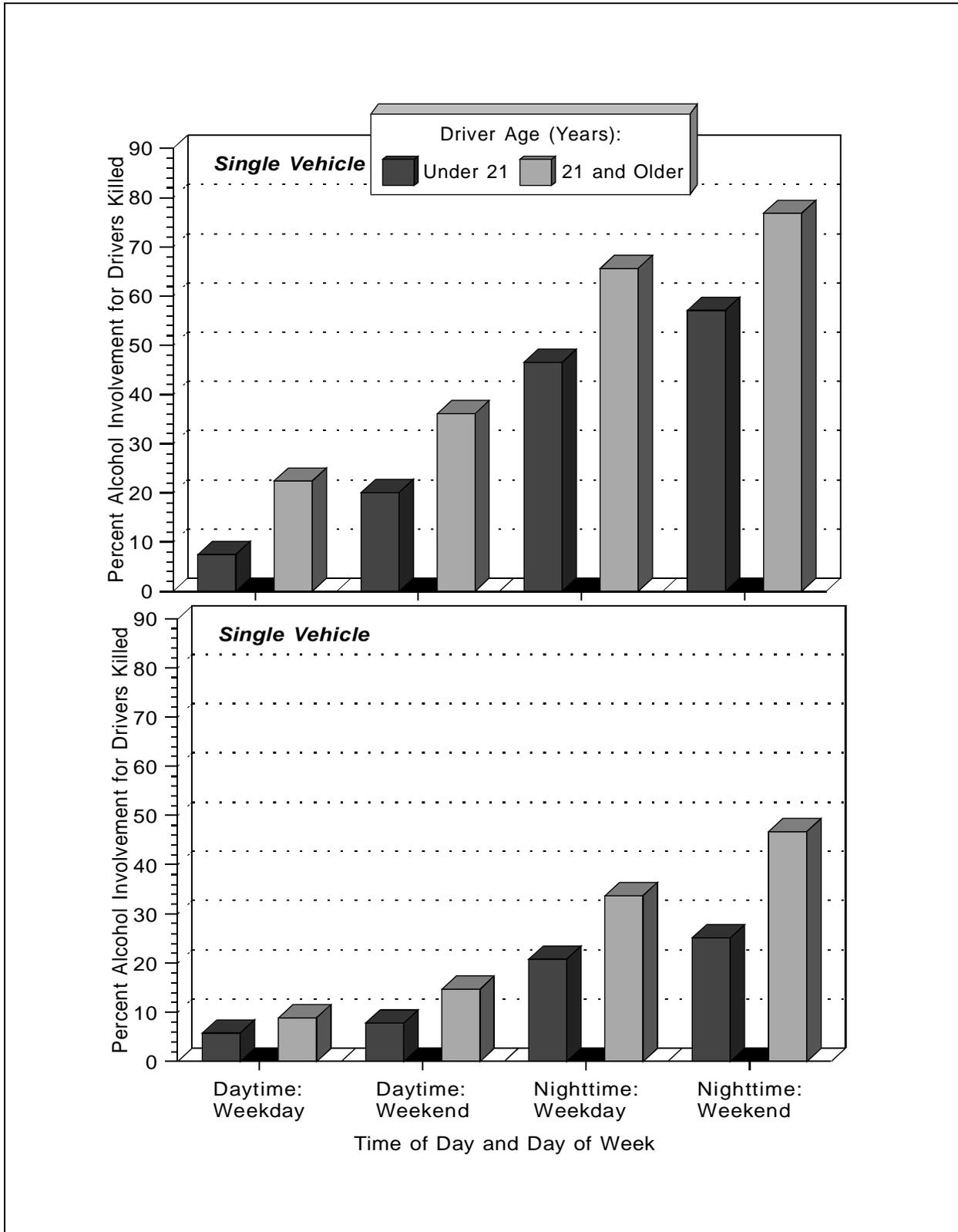


Table 80
Drivers Involved in Crashes by Vehicle Type, Alcohol Involvement, and Crash Severity

Vehicle Type	Alcohol Involvement				Total	
	Yes		No			
	Number	Percent	Number	Percent	Number	Percent
Drivers in Fatal Crashes*						
Passenger Car	6,874	24	21,983	76	28,857	100
Light Truck	4,924	26	14,180	74	19,104	100
Large Truck	114	2	4,769	98	4,883	100
Motorcycle	923	40	1,400	60	2,323	100
Bus	3	1	280	99	283	100
Other/Unknown	348	32	745	68	1,093	100
Total	13,185	23	43,358	77	56,543	100
Drivers in Injury Crashes**						
Passenger Car	116,000	5	2,426,000	95	2,542,000	100
Light Truck	68,000	6	989,000	94	1,057,000	100
Large Truck	1,000	1	87,000	99	88,000	100
Motorcycle	4,000	9	41,000	91	45,000	100
Bus	***	***	13,000	100	13,000	100
Other/Unknown	1,000	8	6,000	92	7,000	100
Total	189,000	5	3,562,000	95	3,751,000	100
Drivers in Property-Damage-Only Crashes**						
Passenger Car	127,000	3	4,754,000	97	4,881,000	100
Light Truck	107,000	5	2,199,000	95	2,306,000	100
Large Truck	***	0	315,000	100	315,000	100
Motorcycle	***	3	8,000	97	9,000	100
Bus	***	***	40,000	100	40,000	100
Other/Unknown	***	***	9,000	100	9,000	100
Total	234,000	3	7,325,000	97	7,560,000	100

* Blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or greater. NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

** Police-reported alcohol involvement.

*** Less than 500 or less than 0.5 percent.

Table 81
Persons Killed, by Age and Highest Blood Alcohol Concentration (BAC) in the Crash

Age (Years)	Highest BAC in Crash								Total	
	0.00		0.01-0.09		0.10 or Higher		0.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	599	79	55	7	103	14	158	21	757	100
5-9	637	80	53	7	105	13	159	20	796	100
10-15	1,128	78	114	8	195	14	309	22	1,437	100
16-20	3,623	63	605	11	1,500	26	2,104	37	5,727	100
21-24	1,643	44	413	11	1,713	45	2,126	56	3,769	100
25-34	3,224	47	663	10	3,041	44	3,704	53	6,928	100
35-44	3,266	49	592	9	2,838	42	3,430	51	6,696	100
45-54	2,833	59	375	8	1,577	33	1,952	41	4,785	100
55-64	2,298	72	220	7	683	21	904	28	3,202	100
65-74	2,565	82	177	6	390	12	567	18	3,132	100
>74	3,664	89	204	5	269	7	473	11	4,137	100
Unknown	56	54	7	6	42	40	49	46	105	100
Total	25,536	62	3,479	8	12,456	30	15,935	38	41,471	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 82
Pedestrians Killed, by Pedestrian's and Driver's Blood Alcohol Concentration (BAC)

Pedestrian's BAC	Driver's BAC						Total	
	0.00		0.01-0.09		0.10 or Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0.00	2,814	55	170	3	281	5	3,264	63
0.01-0.09	247	5	26	1	50	1	324	6
0.10 or Higher	1,181	23	138	3	254	5	1,573	30
Total*	4,242	82	335	6	585	11	5,162	100

* Does not include pedestrians in hit and run crashes.

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 83
Drivers Involved in Crashes by Vehicle Type, Restraint Use, and Crash Severity

Vehicle Type	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Drivers in Fatal Crashes								
Passenger Car	15,872	55.0	10,015	34.7	2,970	10.3	28,857	100.0
Light Truck	9,856	51.6	7,524	39.4	1,724	9.0	19,104	100.0
Large Truck	3,376	69.1	925	18.9	582	11.9	4,883	100.0
Bus	205	72.4	44	15.5	34	12.0	283	100.0
Other/Unknown	163	14.9	359	32.8	571	52.2	1,093	100.0
Total*	29,472	54.4	18,867	34.8	5,881	10.8	54,220	100.0
Drivers in Injury Crashes								
Passenger Car	2,023,000	79.6	205,000	8.1	314,000	12.4	2,542,000	100.0
Light Truck	840,000	79.4	103,000	9.8	114,000	10.8	1,057,000	100.0
Large Truck	65,000	74.4	9,000	10.3	13,000	15.3	88,000	100.0
Bus	9,000	73.5	1,000	7.5	2,000	18.9	13,000	100.0
Other/Unknown	2,000	24.2	4,000	54.8	1,000	20.9	7,000	100.0
Total*	2,939,000	79.3	323,000	8.7	445,000	12.0	3,707,000	100.0
Drivers in Property-Damage-Only Crashes								
Passenger Car	3,871,000	79.3	172,000	3.5	838,000	17.2	4,881,000	100.0
Light Truck	1,850,000	80.2	96,000	4.2	360,000	15.6	2,306,000	100.0
Large Truck	224,000	71.1	15,000	4.9	76,000	24.0	315,000	100.0
Bus	31,000	77.7	2,000	3.9	7,000	18.4	40,000	100.0
Other/Unknown	2,000	28.0	5,000	57.9	1,000	14.1	9,000	100.0
Total*	5,978,000	79.2	290,000	3.8	1,283,000	17.0	7,551,000	100.0
Drivers in All Crashes								
Passenger Car	5,909,000	79.3	387,000	5.2	1,156,000	15.5	7,452,000	100.0
Light Truck	2,699,000	79.8	207,000	6.1	476,000	14.1	3,382,000	100.0
Large Truck	293,000	71.8	25,000	6.2	90,000	22.0	408,000	100.0
Bus	41,000	76.7	3,000	4.8	10,000	18.5	53,000	100.0
Other/Unknown	4,000	25.6	9,000	55.0	3,000	19.4	17,000	100.0
Total*	8,947,000	79.1	631,000	5.6	1,734,000	15.3	11,312,000	100.0

* Excludes motorcycle drivers.

Note: Restraint use is determined by police and may be overreported for survivors.

Table 84
Passenger Car, Light Truck, and Large Truck Occupants Killed or Injured,
by Age and Restraint Use

Age (Years)	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupants Killed								
<5	261	46.0	268	47.3	38	6.7	567	100.0
5-9	196	39.6	259	52.3	40	8.1	495	100.0
10-15	243	25.3	624	65.0	93	9.7	960	100.0
16-20	1,422	28.0	3,250	64.0	409	8.0	5,081	100.0
21-24	828	26.5	2,031	65.0	266	8.5	3,125	100.0
25-34	1,450	27.0	3,430	63.9	486	9.1	5,366	100.0
35-44	1,458	29.4	3,059	61.8	434	8.8	4,951	100.0
45-54	1,324	36.7	1,968	54.6	312	8.7	3,604	100.0
55-64	990	40.5	1,244	50.9	212	8.7	2,446	100.0
65-74	1,302	50.9	1,046	40.9	211	8.2	2,559	100.0
>74	1,818	54.4	1,214	36.3	310	9.3	3,342	100.0
Unknown	3	7.0	24	55.8	16	37.2	43	100.0
Total	11,295	34.7	18,417	56.6	2,827	8.7	32,539	100.0
Occupants Injured								
<5	60,000	79.2	11,000	13.9	5,000	6.9	76,000	100.0
5-9	66,000	76.2	16,000	18.4	5,000	5.4	86,000	100.0
10-15	100,000	66.8	40,000	27.0	9,000	6.2	149,000	100.0
16-20	375,000	70.4	114,000	21.3	44,000	8.3	533,000	100.0
21-24	214,000	74.2	48,000	16.7	26,000	9.1	289,000	100.0
25-34	466,000	77.8	81,000	13.6	52,000	8.7	600,000	100.0
35-44	398,000	79.5	65,000	13.0	38,000	7.5	501,000	100.0
45-54	290,000	84.3	33,000	9.5	22,000	6.3	344,000	100.0
55-64	160,000	82.5	18,000	9.1	16,000	8.4	193,000	100.0
65-74	108,000	85.0	10,000	7.9	9,000	7.1	127,000	100.0
>74	80,000	85.3	8,000	8.1	6,000	6.6	94,000	100.0
Total	2,317,000	77.4	443,000	14.8	232,000	7.8	2,993,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

Table 85
Passenger Car, Light Truck, or Large Truck Occupant Survivors of Fatal Crashes
by Age and Restraint Use

Age (Years)	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	1,607	70.3	538	23.5	141	6.2	2,286	100.0
5-9	1,328	56.8	796	34.1	212	9.1	2,336	100.0
10-15	1,670	47.5	1,566	44.5	280	8.0	3,516	100.0
16-20	4,648	48.5	4,111	42.9	819	8.6	9,578	100.0
21-24	2,879	52.6	2,059	37.6	540	9.9	5,478	100.0
25-34	6,225	60.9	3,010	29.4	992	9.7	10,227	100.0
35-44	5,960	68.6	1,962	22.6	765	8.8	8,687	100.0
45-54	4,264	73.8	1,010	17.5	507	8.8	5,781	100.0
55-64	2,494	77.0	518	16.0	225	7.0	3,237	100.0
65-74	1,637	75.5	364	16.8	166	7.7	2,167	100.0
>74	1,174	74.8	257	16.4	138	8.8	1,569	100.0
Unknown	335	21.0	251	15.7	1,008	63.2	1,594	100.0
Total	34,221	60.6	16,442	29.1	5,793	10.3	56,456	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

Table 86
Passenger Car Occupants Killed or Injured, by Seating Position and Restraint Use

Seating Position	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car Occupants Killed								
Front Seat	8,007	42.2	9,358	49.4	1,595	8.4	18,960	100.0
Left	5,969	41.4	7,221	50.1	1,233	8.5	14,423	100.0
Middle	14	26.9	35	67.3	3	5.8	52	100.0
Right	2,024	45.2	2,091	46.7	358	8.0	4,473	100.0
Other/Unknown	0	--	11	91.7	1	8.3	12	100.0
Second Seat	543	27.5	1,234	62.5	196	9.9	1,973	100.0
Left	202	28.3	443	62.1	68	9.5	713	100.0
Middle	60	21.2	195	68.9	28	9.9	283	100.0
Right	273	30.0	547	60.1	90	9.9	910	100.0
Other/Unknown	8	11.9	49	73.1	10	14.9	67	100.0
Other	1	2.6	33	86.8	4	10.5	38	100.0
Unknown	9	4.7	117	60.6	67	34.7	193	100.0
Total	8,560	40.4	10,742	50.8	1,862	8.8	21,164	100.0
Passenger Car Occupants Injured								
Front Seat	1,574,000	80.2	230,000	11.7	158,000	8.0	1,962,000	100.0
Left	1,206,000	81.3	156,000	10.5	121,000	8.2	1,483,000	100.0
Middle	8,000	57.1	4,000	29.1	2,000	13.8	13,000	100.0
Right	360,000	77.3	70,000	15.1	35,000	7.5	466,000	100.0
Second Seat	149,000	65.1	59,000	25.8	21,000	9.1	230,000	100.0
Left	52,000	63.5	21,000	25.2	9,000	11.4	82,000	100.0
Middle	19,000	58.2	11,000	33.3	3,000	8.5	33,000	100.0
Right	78,000	68.2	28,000	24.1	9,000	7.7	115,000	100.0
Other	3,000	32.1	6,000	63.2	*	4.7	10,000	100.0
Total	1,726,000	78.4	296,000	13.4	179,000	8.1	2,201,000	100.0

* Less than 500.

Note: Restraint use is determined by police and may be overreported for survivors.

Table 87
Light Truck Occupants Killed or Injured, by Seating Position and Restraint Use

Seating Position	Restraint Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent

Light Truck Occupants Killed

Front Seat	2,396	25.6	6,286	67.1	683	7.3	9,365	100.0
Left	1,826	25.2	4,845	66.9	570	7.9	7,241	100.0
Middle	17	11.0	131	85.1	6	3.9	154	100.0
Right	553	28.4	1,285	66.1	107	5.5	1,945	100.0
Other/Unknown	0	--	25	100.0	0	--	25	100.0
Second Seat	144	20.1	525	73.4	46	6.4	715	100.0
Left	62	23.6	185	70.3	16	6.1	263	100.0
Middle	18	13.6	104	78.8	10	7.6	132	100.0
Right	62	22.2	198	71.0	19	6.8	279	100.0
Other/Unknown	2	4.9	38	92.7	1	2.4	41	100.0
Other	33	8.3	328	82.8	35	8.8	396	100.0
Unknown	6	3.5	119	69.6	46	26.9	171	100.0
Total	2,579	24.2	7,258	68.2	810	7.6	10,647	100.0

Light Truck Occupants Injured

Front Seat	522,000	76.2	116,000	17.0	47,000	6.9	686,000	100.0
Left	394,000	78.2	73,000	14.6	37,000	7.3	504,000	100.0
Middle	8,000	51.5	7,000	45.3	1,000	3.3	16,000	100.0
Right	120,000	72.4	36,000	21.5	10,000	6.0	166,000	100.0
Second Seat	44,000	67.2	19,000	28.6	3,000	4.2	65,000	100.0
Left	16,000	69.6	6,000	27.5	1,000	3.0	23,000	100.0
Middle	8,000	58.9	5,000	37.3	1,000	3.7	14,000	100.0
Right	20,000	69.3	7,000	25.2	2,000	5.4	28,000	100.0
Other	5,000	41.8	6,000	50.9	1,000	7.3	12,000	100.0
Total	571,000	74.9	141,000	18.5	51,000	6.7	763,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

Table 88
Passenger Car and Light Truck Occupants Killed and Injured,
by Restraint Use and Type of Restraint

Restraint Use and Type of Restraint	Vehicle Type			
	Passenger Car		Light Truck	
	Number	Percent	Number	Percent
Occupants Killed				
Restraint Used				
Lap/Shoulder Belt	5,706	27.0	1,825	17.1
Lap Belt	298	1.4	138	1.3
Shoulder Belt	262	1.2	13	0.1
Child Safety Seat	128	0.6	36	0.3
Type Unknown	538	2.5	143	1.3
Restraint Used, Airbag Deployed	1,580	7.5	397	3.7
Safety Belt Used Improperly	48	0.2	27	0.3
<i>Subtotal</i>	<i>8,560</i>	<i>40.4</i>	<i>2,579</i>	<i>24.2</i>
No Restraint Used	9,438	44.6	6,770	63.6
No Restraint Used, Airbag Deployed	1,281	6.1	471	4.4
Child Safety Seat Used Improperly	23	0.1	17	0.2
Restraint Use Unknown	1,862	8.8	810	7.6
Total	21,164	100.0	10,647	100.0
Occupants Injured				
Restraint Used				
Lap/Shoulder Belt	1,275,000	57.9	433,000	56.7
Lap Belt	66,000	3.0	34,000	4.4
Shoulder Belt	15,000	0.7	3,000	0.4
Child Safety Seat	26,000	1.2	8,000	1.1
Type Unknown	159,000	7.2	55,000	7.3
Restraint Used, Airbag Deployed	185,000	8.4	38,000	5.0
<i>Subtotal</i>	<i>1,726,000</i>	<i>78.4</i>	<i>571,000</i>	<i>74.9</i>
No Restraint Used	278,000	12.6	136,000	17.8
No Restraint Used, Airbag Deployed	17,000	0.8	5,000	0.7
Restraint Use Unknown	179,000	8.1	51,000	6.7
Total	2,201,000	100.0	763,000	100.0

Note: Restraint use is determined by police and may be overreported for survivors.

NOTE: The data in Table 88 have been revised from those shown in the printed report. The printed version erroneously distributed the data for occupants killed where the airbag deployed across the other restraint type categories. The corrected data are shown on this page.

Table 89
Motorcycle Occupants Killed or Injured, by Time of Day and Day of Week

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Motorcycle Occupants Killed						
Midnight to 3 am	96	8.9	176	14.7	272	11.9
3 am to 6 am	31	2.9	53	4.4	84	3.7
6 am to 9 am	86	8.0	25	2.1	111	4.9
9 am to Noon	83	7.7	83	6.9	166	7.3
Noon to 3 pm	166	15.4	147	12.3	313	13.7
3 pm to 6 pm	242	22.4	226	18.9	468	20.5
6 pm to 9 pm	211	19.5	254	21.3	465	20.4
9 pm to Midnight	155	14.4	210	17.6	365	16.0
Unknown	10	0.9	21	1.8	40	1.8
Total*	1,080	100.0	1,195	100.0	2,284	100.0
Motorcycle Occupants Injured						
Midnight to 3 am	1,000	4.1	2,000	7.2	3,000	5.5
3 am to 6 am	**	0.7	1,000	3.7	1,000	2.0
6 am to 9 am	3,000	11.9	1,000	2.6	4,000	7.7
9 am to Noon	2,000	9.1	2,000	10.0	5,000	9.5
Noon to 3 pm	3,000	12.6	5,000	21.0	8,000	16.4
3 pm to 6 pm	8,000	29.5	4,000	18.9	12,000	24.7
6 pm to 9 pm	6,000	21.0	5,000	20.6	10,000	20.8
9 pm to Midnight	3,000	11.2	4,000	16.1	7,000	13.4
Total	27,000	100.0	22,000	100.0	49,000	100.0

* Includes 9 motorcycle operators killed on unknown day of week.

** Less than 500.

Figure 28
Average Number of Motorcyclists Killed per Hour by Time of Day and Day of Week

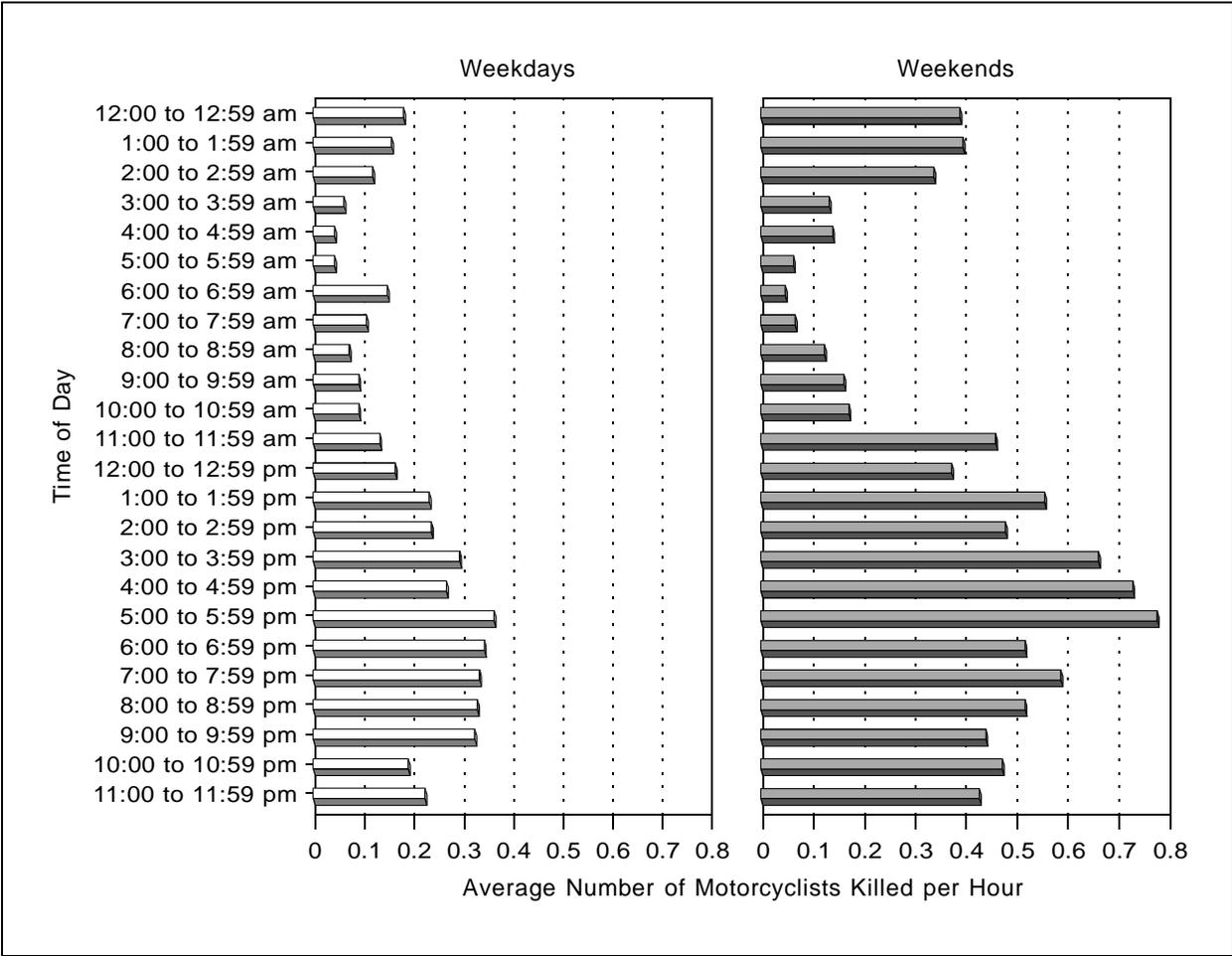


Table 90
Motorcyclists Killed, by Person Type and Helmet Use

Person Type	Helmet Use						Total	
	Used		Not Used		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Operators	1,091	52.5	912	43.8	77	3.7	2,080	100.0
Passengers	85	41.7	105	51.5	14	6.9	204	100.0
Total	1,176	51.5	1,017	44.5	91	4.0	2,284	100.0

Table 91
Motorcycle Operators Involved in Fatal Crashes by Age and License Compliance

Age (Years)	License Compliance					Total
	Not Licensed	No Motorcycle License Required	No Valid Motorcycle License	Valid Motorcycle License	Unknown	
<16	20	1	2	8	0	31
16-20	17	2	80	104	1	204
21-24	14	1	112	173	3	303
25-34	22	2	226	442	6	698
35-44	12	2	158	425	7	604
45-54	4	2	43	257	4	310
55-64	0	3	10	103	3	119
65-74	2	0	1	32	0	35
>74	1	2	2	11	1	17
Unknown	0	0	0	0	2	2
Total	92	15	634	1,555	27	2,323

Table 92
Pedestrians Killed in School Bus Related Crashes,
by Age and Striking Vehicle

Age (Years)	Striking Vehicle		Total
	Bus	Other Vehicle	
<5	3	0	3
5-9	6	3	9
10-15	1	0	1
>15	10	0	10
Total	20	3	23

Table 93
Persons Killed or Injured in School Bus Related Crashes by Person Type

Person Type	Killed		Injured	
	Number	Percent	Number	Percent
School Bus Driver	3	2.4	2,000	9.9
School Bus Passenger	3	2.4	6,000	33.4
Pedestrian	23	18.3	*	2.2
Pedalcyclist	7	5.6	*	0.7
Occupant of Other Vehicle	90	71.4	9,000	53.6
Other/Unknown	0	0.0	*	0.3
Total	126	100.0	17,000	100.0

* Less than 500.

Table 94
Pedestrians Killed or Injured, by Age and Location

Age (Years)	Location				Total	
	Intersection		Nonintersection			
	Number	Percent	Number	Percent	Number	Percent
Pedestrians Killed						
<5	20	11.8	149	87.6	170	100.0
5-9	37	18.3	163	80.7	202	100.0
10-15	47	22.6	161	77.4	208	100.0
16-20	49	16.3	248	82.4	301	100.0
21-24	32	12.6	220	87.0	253	100.0
25-34	83	12.2	591	86.9	680	100.0
35-44	163	17.5	761	81.5	934	100.0
45-54	160	22.0	563	77.3	728	100.0
55-64	117	22.5	402	77.2	521	100.0
65-74	160	34.8	297	64.6	460	100.0
>74	247	34.9	454	64.1	708	100.0
Unknown	16	29.1	37	67.3	55	100.0
Total*	1,131	21.7	4,046	77.5	5,220	100.0
Pedestrians Injured						
<5	***	12.9	2,000	69.6	3,000	100.0
5-9	2,000	17.9	7,000	80.1	8,000	100.0
10-15	4,000	41.8	6,000	57.4	10,000	100.0
16-20	3,000	42.1	4,000	56.7	7,000	100.0
21-24	2,000	42.4	2,000	47.9	4,000	100.0
25-34	4,000	41.5	5,000	52.6	9,000	100.0
35-44	4,000	41.4	6,000	53.1	11,000	100.0
45-54	3,000	44.3	4,000	55.7	7,000	100.0
55-64	1,000	32.8	2,000	46.4	4,000	100.0
65-74	1,000	53.3	1,000	44.2	3,000	100.0
>74	1,000	55.1	1,000	44.9	2,000	100.0
Total**	26,000	38.1	39,000	57.1	69,000	100.0

* Includes 43 pedestrians killed at other or unknown locations.

** Includes 3,000 pedestrians injured at other or unknown locations.

*** Less than 500.

Table 95
Pedestrians Killed or Injured and Fatality and Injury Rates per 100,000 Population
by Age and Sex

Age (Years)	Male			Female			Total		
	Number	Population (Thousands)	Rate	Number	Population (Thousands)	Rate	Number	Population (Thousands)	Rate
Pedestrians Killed									
<5	102	9,696	1.05	68	9,270	0.73	170	18,966	0.90
5-9	128	10,195	1.26	74	9,726	0.76	202	19,921	1.01
10-15	121	11,854	1.02	87	11,281	0.77	208	23,135	0.90
16-20	214	9,983	2.14	87	9,445	0.92	301	19,429	1.55
21-24	198	7,059	2.80	55	6,833	0.80	253	13,892	1.82
25-34	510	19,254	2.65	170	19,521	0.87	680	38,774	1.75
35-44	652	22,101	2.95	282	22,419	1.26	934	44,520	2.10
45-54	539	16,900	3.19	189	17,685	1.07	728	34,585	2.10
55-64	373	10,806	3.45	148	11,870	1.25	521	22,676	2.30
65-74	275	8,250	3.33	185	10,146	1.82	460	18,395	2.50
>74	397	5,949	6.67	311	10,057	3.09	708	16,006	4.42
Unknown	44	*	*	9	*	*	55	*	*
Total**	3,553	132,046	2.69	1,665	138,252	1.20	5,220	270,299	1.93
Pedestrians Injured									
<5	2,000	9,696	19	1,000	9,270	16	3,000	18,966	17
5-9	6,000	10,195	55	3,000	9,726	29	8,000	19,921	42
10-15	6,000	11,854	51	4,000	11,281	37	10,000	23,135	44
16-20	4,000	9,983	44	3,000	9,445	32	7,000	19,429	38
21-24	2,000	7,059	24	3,000	6,833	38	4,000	13,892	31
25-34	6,000	19,254	29	4,000	19,521	20	9,000	38,774	24
35-44	6,000	22,101	29	4,000	22,419	19	11,000	44,520	24
45-54	4,000	16,900	25	2,000	17,685	14	7,000	34,585	19
55-64	2,000	10,806	21	1,000	11,870	12	4,000	22,676	16
65-74	1,000	8,250	14	1,000	10,146	15	3,000	18,395	14
>74	1,000	5,949	22	1,000	10,057	10	2,000	16,006	15
Total	40,000	132,046	31	29,000	138,252	21	69,000	270,299	26

* Not applicable.

** Includes 2 pedestrian fatalities of unknown sex.

Source: Population—Bureau of the Census. Totals may not equal sum of components due to independent rounding.

Table 96
Pedestrians Killed or Injured, by Time of Day and Day of Week

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Pedestrians Killed						
Midnight to 3 am	193	6.3	381	17.8	574	11.0
3 am to 6 am	174	5.7	157	7.3	331	6.3
6 am to 9 am	353	11.5	76	3.5	429	8.2
9 am to Noon	269	8.8	73	3.4	342	6.6
Noon to 3 pm	328	10.7	87	4.1	415	8.0
3 pm to 6 pm	521	17.0	166	7.7	687	13.2
6 pm to 9 pm	725	23.6	584	27.2	1,309	25.1
9 pm to Midnight	491	16.0	611	28.5	1,102	21.1
Unknown	12	0.4	10	0.5	31	0.6
Total	3,066	100.0	2,145	100.0	5,220	100.0
Pedestrians Injured						
Midnight to 3 am	1,000	1.7	1,000	5.6	2,000	2.8
3 am to 6 am	1,000	1.6	**	2.2	1,000	1.8
6 am to 9 am	8,000	16.1	**	1.4	8,000	11.8
9 am to Noon	6,000	12.9	1,000	7.2	8,000	11.2
Noon to 3 pm	7,000	14.9	4,000	17.2	11,000	15.6
3 pm to 6 pm	12,000	25.6	3,000	13.9	15,000	22.1
6 pm to 9 pm	9,000	17.9	6,000	29.1	15,000	21.2
9 pm to Midnight	4,000	9.2	5,000	23.5	9,000	13.5
Total	49,000	100.0	20,000	100.0	69,000	100.0

* Includes 9 pedestrians killed at unknown time of day and day of week.

** Less than 500.

Figure 29
Average Number of Pedestrians Killed per Hour by Time of Day and Day of Week

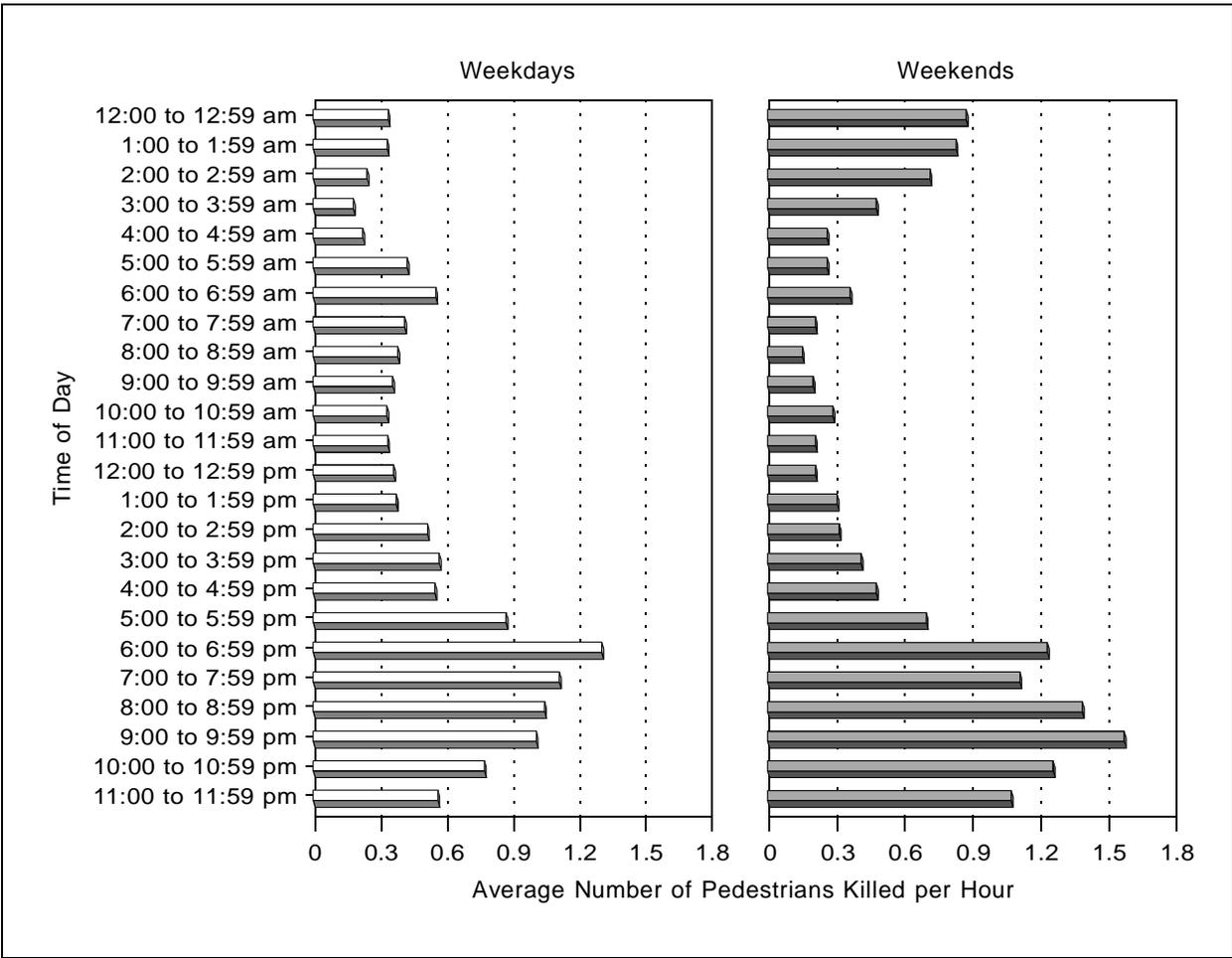


Table 97
Pedestrians Killed or Injured in Single-Vehicle Crashes, by Vehicle Type
and Initial Point of Impact

Vehicle Type	Initial Point of Impact										Total	
	Front		Right Side		Left Side		Rear		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pedestrians Killed												
Passenger Car	2,186	89.4	53	2.2	64	2.6	22	0.9	119	4.9	2,444	100.0
Light Truck	1,462	88.5	40	2.4	45	2.7	32	1.9	72	4.4	1,651	100.0
Large Truck	178	62.2	21	7.3	14	4.9	33	11.5	40	14.0	286	100.0
Motorcycle	19	90.5	0	--	2	9.5	0	--	0	--	21	100.0
Other/Unknown	187	47.6	12	3.1	11	2.8	8	2.0	175	44.5	393	100.0
Total	4,032	84.1	126	2.6	136	2.8	95	2.0	406	8.5	4,795	100.0
Pedestrians Injured												
Passenger Car	35,000	72.3	8,000	16.1	4,000	8.8	1,000	2.0	*	0.8	48,000	100.0
Light Truck	9,000	62.5	3,000	20.8	2,000	14.0	*	1.8	*	0.9	15,000	100.0
Other	2,000	76.6	*	12.3	*	6.0	*	5.2	*	*	2,000	100.0
Total	46,000	70.3	11,000	17.0	6,000	9.9	1,000	2.0	1,000	0.8	65,000	100.0

* Less than 500 or less than 0.05 percent.

Table 98
Pedestrians Killed, by Related Factors

Factors	Number	Percent
Walking, playing, working, etc., in roadway	1,589	30.4
Improper crossing of roadway or intersection	1,517	29.1
Failure to yield right of way	709	13.6
Darting or running into road	649	12.4
Not visible	414	7.9
Inattentive (talking, eating, etc.)	131	2.5
Physical impairment	70	1.3
Failure to obey traffic signs, signals, or officer	67	1.3
Emotional (e.g., depression, angry, disturbed)	25	0.5
Getting on/off/in/out of transport vehicle	22	0.4
Ill, blackout	12	0.2
Nonmotorist pushing vehicle	8	0.2
Other factors	106	2.0
None reported	1,271	24.3
Unknown	105	2.0
Total	5,220	100.0

Note: The sum of the numbers and percentages is greater than total pedestrians killed as more than one factor may be present for the same pedestrian.

Table 99
Pedalcyclists Killed or Injured, by Age and Location

Age (Years)	Location				Total	
	Intersection		Nonintersection			
	Number	Percent	Number	Percent	Number	Percent
Pedalcyclists Killed						
<5	2	33.3	4	66.7	6	100.0
5-9	22	28.9	54	71.1	76	100.0
10-15	38	25.7	110	74.3	148	100.0
16-20	18	34.0	34	64.2	53	100.0
21-24	9	24.3	28	75.7	37	100.0
25-34	32	30.5	73	69.5	105	100.0
35-44	30	22.4	104	77.6	134	100.0
45-54	28	33.7	55	66.3	83	100.0
55-64	15	25.9	43	74.1	58	100.0
65-74	6	17.1	29	82.9	35	100.0
>74	13	54.2	11	45.8	24	100.0
Unknown	1	50.0	1	50.0	2	100.0
Total*	214	28.1	546	71.7	761	100.0
Pedalcyclists Injured						
<5	**	15.0	**	74.4	**	100.0
5-9	2,000	36.1	4,000	63.9	7,000	100.0
10-15	10,000	60.3	7,000	39.7	17,000	100.0
16-20	4,000	64.7	2,000	34.8	6,000	100.0
21-24	3,000	59.0	2,000	41.0	4,000	100.0
25-34	5,000	65.2	3,000	33.5	8,000	100.0
35-44	3,000	52.5	3,000	46.5	6,000	100.0
45-54	2,000	67.8	1,000	29.7	3,000	100.0
55-64	1,000	69.5	**	30.5	1,000	100.0
65-74	1,000	71.8	**	28.1	1,000	100.0
>74	**	41.4	**	59.0	**	100.0
Total	31,000	58.2	22,000	41.3	53,000	100.0

* Includes 1 pedalcyclist killed at other or unknown location.

** Less than 500.

Table 100
Pedalcyclists Killed or Injured and Fatality and Injury Rates per 100,000 Population
by Age and Sex

Age (Years)	Male			Female			Total		
	Number	Population (Thousands)	Rate	Number	Population (Thousands)	Rate	Number	Population (Thousands)	Rate
Pedalcyclists Killed									
<5	5	9,696	0.05	1	9,270	0.01	6	18,966	0.03
5-9	59	10,195	0.58	17	9,726	0.17	76	19,921	0.38
10-15	130	11,854	1.10	18	11,281	0.16	148	23,135	0.64
16-20	46	9,983	0.46	7	9,445	0.07	53	19,429	0.27
21-24	29	7,059	0.41	8	6,833	0.12	37	13,892	0.27
25-34	96	19,254	0.50	9	19,521	0.05	105	38,774	0.27
35-44	125	22,101	0.57	9	22,419	0.04	134	44,520	0.30
45-54	68	16,900	0.40	15	17,685	0.08	83	34,585	0.24
55-64	51	10,806	0.47	7	11,870	0.06	58	22,676	0.26
65-74	29	8,250	0.35	6	10,146	0.06	35	18,395	0.19
>74	22	5,949	0.37	2	10,057	0.02	24	16,006	0.15
Unknown	2	*	*	0	*	*	2	*	*
Total	662	132,046	0.50	99	138,252	0.07	761	270,299	0.28
Pedalcyclists Injured									
<5	**	9,696	2	**	9,270	1	**	18,966	1
5-9	5,000	10,195	45	2,000	9,726	20	7,000	19,921	33
10-15	13,000	11,854	113	3,000	11,281	31	17,000	23,135	73
16-20	5,000	9,983	47	1,000	9,445	13	6,000	19,429	31
21-24	4,000	7,059	59	**	6,833	4	4,000	13,892	32
25-34	7,000	19,254	36	1,000	19,521	6	8,000	38,774	21
35-44	5,000	22,101	22	1,000	22,419	3	6,000	44,520	13
45-54	3,000	16,900	16	**	17,685	2	3,000	34,585	9
55-64	1,000	10,806	11	**	11,870	2	1,000	22,676	6
65-74	1,000	8,250	10	**	10,146	1	1,000	18,395	5
>74	**	5,949	4	**	10,057	***	**	16,006	2
Total	44,000	132,046	33	9,000	138,252	7	53,000	270,299	20

* Not applicable.

** Less than 500.

*** Less than 0.5.

Source: Population—Bureau of the Census. Totals may not equal sum of components due to independent rounding.

Table 101
Pedalcyclists Killed or Injured, by Time of Day and Day of Week

Time of Day	Day of Week				Total	
	Weekday		Weekend			
	Number	Percent	Number	Percent	Number	Percent
Pedalcyclists Killed						
Midnight to 3 am	23	4.8	24	8.5	47	6.2
3 am to 6 am	19	4.0	9	3.2	28	3.7
6 am to 9 am	40	8.4	17	6.0	57	7.5
9 am to Noon	42	8.8	17	6.0	59	7.8
Noon to 3 pm	74	15.4	32	11.3	106	13.9
3 pm to 6 pm	133	27.8	32	11.3	165	21.7
6 pm to 9 pm	95	19.8	82	29.1	177	23.3
9 pm to Midnight	53	11.1	66	23.4	119	15.6
Unknown	0	--	3	1.1	3	0.4
Total	479	100.0	282	100.0	761	100.0
Pedalcyclists Injured						
Midnight to 3 am	*	0.4	*	1.8	*	0.8
3 am to 6 am	*	0.3	*	0.5	*	0.3
6 am to 9 am	4,000	9.8	*	1.0	4,000	7.6
9 am to Noon	3,000	8.4	1,000	8.4	4,000	8.4
Noon to 3 pm	7,000	17.3	3,000	22.8	10,000	18.6
3 pm to 6 pm	17,000	41.4	3,000	25.3	20,000	37.4
6 pm to 9 pm	7,000	16.9	4,000	30.9	11,000	20.3
9 pm to Midnight	2,000	5.6	1,000	9.3	3,000	6.5
Total	40,000	100.0	13,000	100.0	53,000	100.0

* Less than 500.

Table 102
Pedalcyclists Killed or Injured in Single-Vehicle Crashes, by Vehicle Type
and Initial Point of Impact

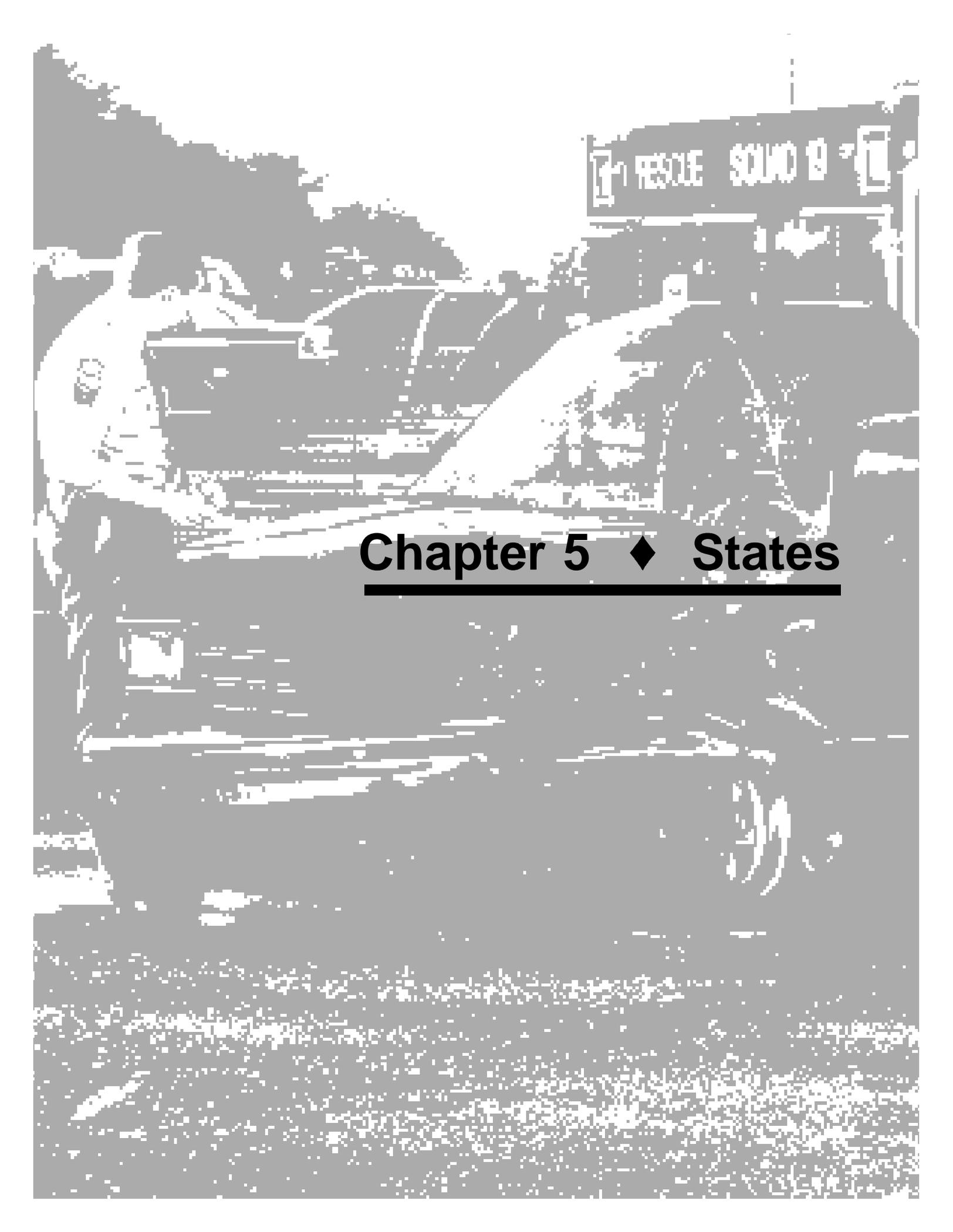
Vehicle Type	Initial Point of Impact										Total	
	Front		Right Side		Left Side		Rear		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pedalcyclists Killed												
Passenger Car	324	91.0	17	4.8	8	2.2	1	0.3	6	1.7	356	100.0
Light Truck	226	84.3	21	7.8	9	3.4	5	1.9	7	2.6	268	100.0
Large Truck	28	50.9	15	27.3	4	7.3	3	5.5	5	9.1	55	100.0
Motorcycle	6	100.0	0	--	0	--	0	--	0	--	6	100.0
Other/Unknown	33	63.5	5	9.6	2	3.8	1	1.9	11	21.2	52	100.0
Total	617	83.7	58	7.9	23	3.1	10	1.4	29	3.9	737	100.0
Pedalcyclists Injured												
Passenger Car	23,000	61.8	10,000	26.6	4,000	10.3	1,000	1.4	*	*	37,000	100.0
Light Truck	9,000	60.0	3,000	23.0	2,000	11.7	*	3.2	*	2.2	15,000	100.0
Other	1,000	63.7	*	27.6	*	6.0	*	1.0	*	1.5	1,000	100.0
Total	32,000	61.3	13,000	25.6	6,000	10.6	1,000	1.9	*	0.6	53,000	100.0

* Less than 500 or less than 0.05 percent.

Table 103
Pedalcyclists Killed, by Related Factors

Factors	Number	Percent
Riding, playing, working, etc., in roadway	167	21.9
Failure to yield right of way	163	21.4
Improper crossing of roadway or intersection	89	11.7
Failure to obey (e.g., signs, control devices, officers)	47	6.2
Operating without required equipment	38	5.0
Erratic, reckless, careless, or negligent operation	36	4.7
Not visible	32	4.2
Failure to keep in proper lane or running off road	29	3.8
Making improper turn	27	3.5
Inattentive (talking, eating, etc.)	25	3.3
Driving on wrong side of road	16	2.1
Failing to have lights on when required	15	2.0
Improper entry to or exit from trafficway	11	1.4
Improper lane changing	10	1.3
Other factors	74	9.7
None reported	216	28.4
Unknown	12	1.6
Total	761	100.0

Note: The sum of the numbers and percentages is greater than total pedalcyclists killed as more than one factor may be present for the same pedalcyclist.

A photograph of a fire truck with "FIRE RESCUE SQUAD 19" on its side. Firefighters are working on a car accident scene. One firefighter is on the left, another is on the right, and a third is visible in the background. The truck is a dark-colored emergency vehicle with reflective stripes. The scene is outdoors on a paved surface.

Chapter 5 ♦ States



5. STATES

Fatal crash and fatality statistics for each of the 50 states, the District of Columbia, and Puerto Rico are presented in this chapter. Several tables display state fatality rates based on population, licensed drivers, and registered vehicles. The last four tables describe each state's safety belt use laws, child passenger protection laws, motorcycle helmet use requirements, and impaired driving legislation. Below are some of the state statistics you will find in this chapter:

- Traffic fatalities decreased by 1 percent from 1997 to 1998 for the nation as a whole. Nineteen states showed increases, ranging from less than 1 percent to as much as 12 percent.
- The pedestrian fatality rate per 100,000 population was 1.93 for the nation. Florida had the highest rate (3.56) and Idaho had the lowest (0.57).
- Nearly 2 percent of all traffic crash fatalities in 1998 were pedalcyclists. The District of Columbia and North Dakota reported no pedalcyclists killed.
- Forty-nine states, plus the District of Columbia and Puerto Rico, have safety belt use laws.
- All states, the District of Columbia, and Puerto Rico have laws requiring children of certain ages to be restrained in child safety seats.
- Motorcycle helmets are required for all riders in 22 states, the District of Columbia, and Puerto Rico. Twenty-five states have helmet requirements with exceptions (age, rider type, roadway type), and three states do not require helmets at all.
- State laws in 33 states and the District of Columbia make it a criminal offense to operate a motor vehicle at a blood alcohol concentration (BAC) of 0.10 g/dl. Fifteen states have adopted 0.08 g/dl. Two states and Puerto Rico do not have illegal per se BAC levels.

Table 104
1998 Traffic Fatalities by State and Percent Change from 1997

State	Fatalities			State	Fatalities		
	1997	1998	Percent Change		1997	1998	Percent Change
AL	1,192	1,071	-10	NE	302	315	+4
AK	77	71	-8	NV	347	361	+4
AZ	951	980	+3	NH	125	128	+2
AR	660	625	-5	NJ	775	743	-4
CA	3,688	3,494	-5	NM	484	424	-12
CO	613	628	+2	NY	1,652	1,498	-9
CT	339	329	-3	NC	1,483	1,596	+8
DE	143	115	-20	ND	105	92	-12
DC	60	54	-10	OH	1,441	1,422	-1
FL	2,785	2,824	+1	OK	838	755	-10
GA	1,577	1,569	-1	OR	524	538	+3
HI	131	120	-8	PA	1,557	1,481	-5
ID	259	265	+2	RI	75	74	-1
IL	1,397	1,393	-0	SC	903	1,002	+11
IN	935	978	+5	SD	148	165	+11
IA	468	449	-4	TN	1,225	1,216	-1
KS	482	493	+2	TX	3,513	3,577	+2
KY	857	858	+0	UT	366	350	-4
LA	931	922	-1	VT	96	104	+8
ME	192	192	0	VA	984	935	-5
MD	611	606	-1	WA	674	660	-2
MA	441	406	-8	WV	381	354	-7
MI	1,446	1,367	-5	WI	725	714	-2
MN	600	650	+8	WY	137	154	+12
MS	861	948	+10	USA	42,013	41,471	-1
MO	1,192	1,169	-2	PR	592	558	-6
MT	265	237	-11				

Figure 30
1998 Traffic Fatalities by State and Percent Change from 1997

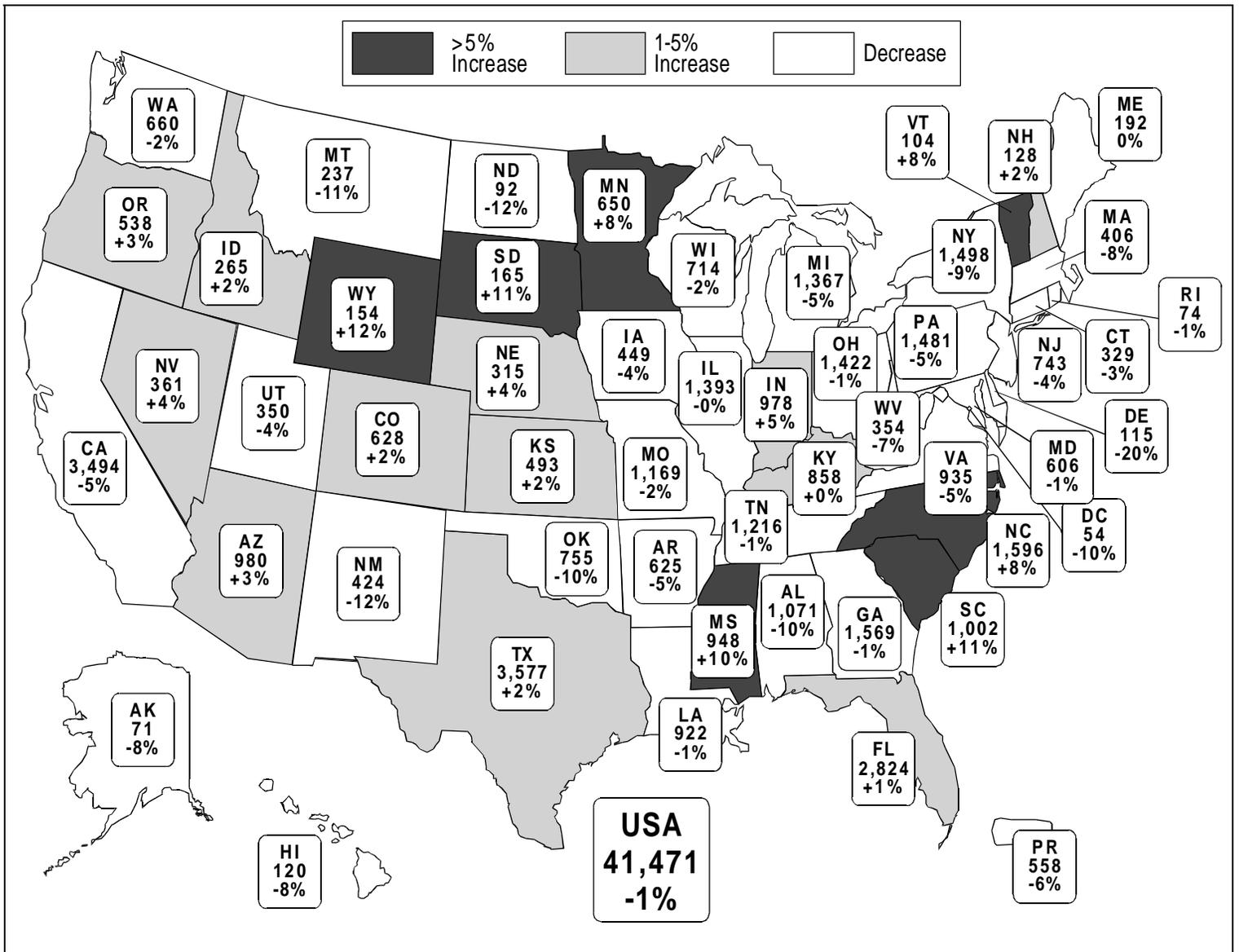


Table 105
Fatal Crashes by State and First Harmful Event

State	First Harmful Event												Total Fatal Crashes	
	Collision with								Non-Collision					
	Motor Vehicle in Transport		Non-Motorist		Fixed Object		Object Not Fixed		Overturn		Other			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	399	41.6	80	8.4	365	38.1	25	2.6	81	8.5	8	0.8	958	100.0
AK	21	32.8	11	17.2	18	28.1	4	6.3	9	14.1	1	1.6	64	100.0
AZ	318	37.0	166	19.3	144	16.8	24	2.8	175	20.4	18	2.1	859	100.0
AR	237	43.5	50	9.2	148	27.2	34	6.2	66	12.1	9	1.7	545	100.0
CA	1,064	34.2	754	24.2	836	26.9	102	3.3	321	10.3	35	1.1	3,112	100.0
CO	210	38.1	79	14.3	137	24.9	17	3.1	100	18.1	8	1.5	551	100.0
CT	113	36.9	43	14.1	128	41.8	13	4.2	8	2.6	1	0.3	306	100.0
DE	52	49.1	17	16.0	31	29.2	2	1.9	4	3.8	0	0.0	106	100.0
DC	22	44.0	13	26.0	14	28.0	0	0.0	0	0.0	1	2.0	50	100.0
FL	1,197	47.0	597	23.4	497	19.5	52	2.0	180	7.1	25	1.0	2,548	100.0
GA	614	43.4	190	13.4	472	33.4	29	2.0	96	6.8	13	0.9	1,415	100.0
HI	42	37.2	20	17.7	36	31.9	2	1.8	13	11.5	0	0.0	113	100.0
ID	89	39.7	9	4.0	42	18.8	6	2.7	75	33.5	3	1.3	224	100.0
IL	532	42.9	214	17.2	349	28.1	50	4.0	92	7.4	4	0.3	1,241	100.0
IN	406	46.1	81	9.2	289	32.8	38	4.3	52	5.9	14	1.6	880	100.0
IA	213	55.2	28	7.3	69	17.9	9	2.3	65	16.8	2	0.5	386	100.0
KS	196	44.4	39	8.8	124	28.1	20	4.5	58	13.2	4	0.9	441	100.0
KY	343	44.8	67	8.7	292	38.1	19	2.5	39	5.1	6	0.8	766	100.0
LA	345	43.0	119	14.8	229	28.5	34	4.2	66	8.2	10	1.2	803	100.0
ME	62	35.2	18	10.2	55	31.3	8	4.5	30	17.0	3	1.7	176	100.0
MD	234	42.6	107	19.5	181	33.0	8	1.5	15	2.7	4	0.7	549	100.0
MA	126	33.4	92	24.4	137	36.3	7	1.9	13	3.4	2	0.5	377	100.0
MI	597	48.3	194	15.7	313	25.3	36	2.9	86	7.0	9	0.7	1,235	100.0
MN	264	45.9	59	10.3	130	22.6	25	4.3	88	15.3	9	1.6	575	100.0
MS	356	42.3	68	8.1	308	36.6	19	2.3	91	10.8	0	0.0	842	100.0
MO	448	44.1	103	10.1	326	32.1	32	3.1	101	9.9	7	0.7	1,017	100.0
MT	64	30.8	14	6.7	42	20.2	11	5.3	73	35.1	4	1.9	208	100.0
NE	116	42.8	28	10.3	47	17.3	16	5.9	63	23.2	1	0.4	271	100.0
NV	116	36.8	47	14.9	53	16.8	6	1.9	91	28.9	2	0.6	315	100.0
NH	45	39.1	12	10.4	42	36.5	2	1.7	14	12.2	0	0.0	115	100.0

Table 105
Fatal Crashes by State and First Harmful Event (Continued)

State	First Harmful Event												Total Fatal Crashes	
	Collision with								Non-Collision					
	Motor Vehicle in Transport		Non-Motorist		Fixed Object		Object Not Fixed		Overturn		Other			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	262	38.9	167	24.8	200	29.7	21	3.1	19	2.8	4	0.6	673	100.0
NM	112	29.9	57	15.2	68	18.2	12	3.2	125	33.4	0	0.0	374	100.0
NY	513	36.9	400	28.8	374	26.9	35	2.5	52	3.7	15	1.1	1,389	100.0
NC	626	43.7	236	16.5	473	33.0	27	1.9	61	4.3	10	0.7	1,433	100.0
ND	26	32.9	4	5.1	16	20.3	4	5.1	28	35.4	1	1.3	79	100.0
OH	555	43.1	144	11.2	508	39.4	38	2.9	32	2.5	12	0.9	1,289	100.0
OK	285	44.0	47	7.3	252	38.9	21	3.2	34	5.3	8	1.2	647	100.0
OR	190	39.2	70	14.4	137	28.2	10	2.1	68	14.0	10	2.1	485	100.0
PA	565	41.7	175	12.9	522	38.6	35	2.6	40	3.0	16	1.2	1,354	100.0
RI	19	27.1	11	15.7	30	42.9	3	4.3	7	10.0	0	0.0	70	100.0
SC	381	41.8	128	14.0	281	30.8	37	4.1	78	8.6	7	0.8	912	100.0
SD	57	38.3	9	6.0	34	22.8	4	2.7	41	27.5	4	2.7	149	100.0
TN	458	41.3	84	7.6	425	38.3	28	2.5	109	9.8	6	0.5	1,110	100.0
TX	1,264	40.0	477	15.1	821	26.0	90	2.8	467	14.8	41	1.3	3,160	100.0
UT	120	39.0	52	16.9	44	14.3	9	2.9	77	25.0	6	1.9	308	100.0
VT	26	29.5	11	12.5	35	39.8	2	2.3	13	14.8	1	1.1	88	100.0
VA	317	38.0	118	14.1	326	39.1	8	1.0	50	6.0	15	1.8	834	100.0
WA	236	40.1	83	14.1	174	29.6	22	3.7	67	11.4	6	1.0	588	100.0
WV	118	35.8	36	10.9	119	36.1	11	3.3	38	11.5	8	2.4	330	100.0
WI	284	44.9	73	11.6	163	25.8	19	3.0	85	13.4	7	1.1	632	100.0
WY	37	28.7	3	2.3	26	20.2	6	4.7	57	44.2	0	0.0	129	100.0
USA*	15,292	41.2	5,704	15.4	10,882	29.3	1,092	2.9	3,713	10.0	380	1.0	37,081	100.0
PR	156	29.8	207	39.5	121	23.1	8	1.5	6	1.1	26	5.0	524	100.0

* Total includes 18 fatal crashes with unknown first harmful event.

Table 106
Fatal Crashes by State and Roadway Function Class

State	Roadway Function Class								Total Fatal Crashes
	Principal Arterial				Minor Arterial	Collector	Local	Unknown	
	Interstate		Freeway and Expressway	Other					
	Rural	Urban							
AL	65	49	1	246	195	249	147	6	958
AK	17	2	2	10	13	12	7	1	64
AZ	140	29	13	245	174	171	80	7	859
AR	46	15	9	137	105	122	108	3	545
CA	176	224	277	941	672	472	350	0	3,112
CO	71	34	26	164	105	79	70	2	551
CT	4	50	22	72	83	36	39	0	306
DE	0	7	1	43	18	24	13	0	106
DC	0	5	0	0	0	0	45	0	50
FL	133	150	66	940	335	86	612	226	2,548
GA	85	78	18	305	289	287	208	145	1,415
HI	1	8	7	28	32	26	11	0	113
ID	47	1	0	61	32	49	27	7	224
IL	74	94	5	302	214	184	368	0	1,241
IN	60	32	18	180	127	229	141	93	880
IA	21	12	0	125	76	110	34	8	386
KS	14	21	15	141	93	99	58	0	441
KY	37	28	2	133	122	295	149	0	766
LA	77	36	3	172	140	272	102	1	803
ME	14	2	6	24	38	56	34	2	176
MD	18	42	25	148	101	81	55	79	549
MA	7	30	12	120	94	49	65	0	377
MI	46	58	25	304	271	331	196	4	1,235
MN	31	26	13	139	142	148	76	0	575
MS	97	5	4	170	4	271	288	3	842
MO	98	94	35	280	131	245	133	1	1,017
MT	30	0	0	68	37	31	42	0	208
NE	28	0	0	84	45	55	59	0	271
NV	62	14	18	78	74	48	21	0	315
NH	8	1	0	37	21	26	20	2	115

Table 106
Fatal Crashes by State and Roadway Function Class (Continued)

State	Roadway Function Class								Total Fatal Crashes
	Principal Arterial				Minor Arterial	Collector	Local	Unknown	
	Interstate		Freeway and Expressway	Other					
	Rural	Urban							
NJ	10	51	48	221	157	93	69	24	673
NM	102	21	1	93	36	57	64	0	374
NY	49	40	110	301	248	288	353	0	1,389
NC	53	65	21	299	178	346	471	0	1,433
ND	7	2	5	17	12	19	17	0	79
OH	39	78	17	240	247	320	342	6	1,289
OK	57	31	17	133	136	159	114	0	647
OR	41	11	3	172	90	125	43	0	485
PA	67	40	27	340	311	290	276	3	1,354
RI	4	12	8	21	10	6	9	0	70
SC	83	16	2	190	207	281	41	92	912
SD	9	1	1	45	34	40	19	0	149
TN	97	50	15	260	267	225	191	5	1,110
TX	200	319	201	662	431	560	787	0	3,160
UT	67	16	1	18	54	34	118	0	308
VT	13	2	1	13	16	27	15	1	88
VA	62	59	13	179	207	213	100	1	834
WA	39	40	25	159	114	152	57	2	588
WV	34	9	0	62	69	115	41	0	330
WI	20	14	7	192	129	163	102	5	632
WY	31	2	0	44	15	28	6	3	129
USA	2,591	2,026	1,146	9,358	6,751	7,684	6,793	732	37,081
PR	33	82	10	93	107	132	67	0	524

Table 107
Fatalities by State and Roadway Function Class

State	Roadway Function Class								Total Fatalities
	Principal Arterial				Minor Arterial	Collector	Local	Unknown	
	Interstate		Freeway and Expressway	Other					
	Rural	Urban							
AL	76	54	1	285	213	276	159	7	1,071
AK	20	2	2	10	13	15	8	1	71
AZ	167	34	13	285	188	196	88	9	980
AR	60	15	9	167	118	137	115	4	625
CA	218	248	308	1,042	747	543	388	0	3,494
CO	84	39	30	187	125	87	74	2	628
CT	5	53	24	78	92	37	40	0	329
DE	0	8	1	48	18	27	13	0	115
DC	0	5	0	0	0	0	49	0	54
FL	167	167	79	1,041	364	95	654	257	2,824
GA	99	83	19	354	327	317	222	148	1,569
HI	1	8	8	30	35	26	12	0	120
ID	57	3	0	73	36	57	32	7	265
IL	88	105	5	337	237	205	416	0	1,393
IN	68	34	20	205	136	254	161	100	978
IA	30	15	0	150	90	119	37	8	449
KS	15	22	18	161	107	109	61	0	493
KY	53	34	2	157	140	317	155	0	858
LA	99	38	3	191	158	324	107	2	922
ME	14	2	8	30	39	59	38	2	192
MD	21	47	30	166	113	86	59	84	606
MA	8	34	15	129	99	53	68	0	406
MI	53	62	26	342	301	359	219	5	1,367
MN	35	30	13	160	156	175	81	0	650
MS	109	6	5	195	4	317	309	3	948
MO	124	109	41	331	150	267	146	1	1,169
MT	33	0	0	83	42	34	45	0	237
NE	35	0	0	100	53	61	66	0	315
NV	69	16	20	97	79	57	23	0	361
NH	9	1	0	43	24	28	21	2	128

Table 107
Fatalities by State and Roadway Function Class (Continued)

State	Roadway Function Class								Total Fatalities
	Principal Arterial				Minor Arterial	Collector	Local	Unknown	
	Interstate		Freeway and Expressway	Other					
	Rural	Urban							
NJ	11	57	67	240	167	104	70	27	743
NM	123	21	1	101	43	65	70	0	424
NY	55	49	119	327	266	309	373	0	1,498
NC	63	77	24	340	194	405	493	0	1,596
ND	7	2	5	17	14	20	27	0	92
OH	46	85	17	280	266	353	368	7	1,422
OK	73	38	18	158	160	185	123	0	755
OR	43	12	3	200	99	134	47	0	538
PA	82	50	35	371	337	314	289	3	1,481
RI	4	12	10	23	10	6	9	0	74
SC	99	17	2	206	230	304	45	99	1,002
SD	9	1	1	52	38	45	19	0	165
TN	121	54	15	290	290	237	204	5	1,216
TX	227	359	215	753	517	658	848	0	3,577
UT	78	18	1	22	64	41	126	0	350
VT	19	2	1	13	16	31	21	1	104
VA	77	71	15	198	233	231	109	1	935
WA	44	44	26	179	124	175	65	3	660
WV	37	10	0	67	75	124	41	0	354
WI	24	16	8	225	144	181	111	5	714
WY	36	3	0	55	17	34	6	3	154
USA	3,095	2,272	1,283	10,594	7,508	8,593	7,330	796	41,471
PR	38	87	10	100	111	143	69	0	558

Table 108
Persons Killed, Licensed Drivers, Registered Vehicles, Population,
and Fatality Rates by State, 1997

State	1997 Licensed Drivers (Thousands)	Fatalities per 100,000 Drivers	1997 Registered Vehicles (Thousands)	Fatalities per 100,000 Registered Vehicles	1997 Population (Thousands)	Fatalities per 100,000 Population	1997 Total Killed
AL	3,387	35.19	3,708	32.15	4,322	27.58	1,192
AK	446	17.26	556	13.85	610	12.62	77
AZ	3,120	30.48	3,218	29.55	4,553	20.89	951
AR	1,879	35.13	1,648	40.05	2,523	26.16	660
CA	20,385	18.09	25,399	14.52	32,182	11.46	3,688
CO	2,836	21.61	3,618	16.94	3,892	15.75	613
CT	2,270	14.93	2,708	12.52	3,267	10.38	339
DE	536	26.68	624	22.92	735	19.46	143
DC	356	16.85	235	25.53	530	11.32	60
FL	11,749	23.70	11,084	25.13	14,677	18.98	2,785
GA	5,063	31.15	6,318	24.96	7,490	21.05	1,577
HI	739	17.73	714	18.35	1,192	10.99	131
ID	844	30.69	1,116	23.21	1,209	21.42	259
IL	7,692	18.16	8,625	16.20	11,989	11.65	1,397
IN	3,924	23.83	5,444	17.17	5,865	15.94	935
IA	1,953	23.96	2,983	15.69	2,854	16.40	468
KS	1,825	26.41	2,200	21.91	2,601	18.53	482
KY	2,575	33.28	2,819	30.40	3,910	21.92	857
LA	2,678	34.76	3,449	26.99	4,354	21.38	931
ME	901	21.31	1,087	17.66	1,242	15.46	192
MD	3,347	18.26	3,825	15.97	5,095	11.99	611
MA	4,393	10.04	5,159	8.55	6,114	7.21	441
MI	6,751	21.42	8,179	17.68	9,780	14.79	1,446
MN	2,839	21.13	4,051	14.81	4,687	12.80	600
MS	1,723	49.97	2,265	38.01	2,732	31.52	861
MO	3,744	31.84	4,406	27.05	5,408	22.04	1,192
MT	662	40.03	1,001	26.47	879	30.15	265
NE	1,179	25.61	1,525	19.80	1,657	18.23	302
NV	1,186	29.26	1,169	29.68	1,679	20.67	347
NH	883	14.16	1,175	10.64	1,172	10.67	125

Note: 1998 data for state licensed drivers and registered vehicles not available at time of publication.

Table 108
Persons Killed, Licensed Drivers, Registered Vehicles, Population,
and Fatality Rates by State, 1997 (Continued)

State	1997 Licensed Drivers (Thousands)	Fatalities per 100,000 Drivers	1997 Registered Vehicles (Thousands)	Fatalities per 100,000 Registered Vehicles	1997 Population (Thousands)	Fatalities per 100,000 Population	1997 Total Killed
NJ	5,576	13.90	5,911	13.11	8,058	9.62	775
NM	1,194	40.54	1,546	31.31	1,724	28.07	484
NY	10,530	15.69	11,009	15.01	18,146	9.10	1,652
NC	5,399	27.47	5,856	25.32	7,431	19.96	1,483
ND	452	23.23	711	14.77	641	16.38	105
OH	8,186	17.60	10,328	13.95	11,193	12.87	1,441
OK	2,279	36.77	2,936	28.54	3,322	25.23	838
OR	2,277	23.01	2,954	17.74	3,243	16.16	524
PA	8,318	18.72	9,008	17.28	12,011	12.96	1,557
RI	680	11.03	727	10.32	987	7.60	75
SC	2,613	34.56	2,890	31.25	3,788	23.84	903
SD	524	28.24	743	19.92	738	20.05	148
TN	3,929	31.18	4,591	26.68	5,372	22.80	1,225
TX	12,834	27.37	13,057	26.91	19,386	18.12	3,513
UT	1,357	26.97	1,553	23.57	2,065	17.72	366
VT	475	20.21	515	18.64	589	16.30	96
VA	4,901	20.08	5,765	17.07	6,737	14.61	984
WA	4,010	16.81	4,807	14.02	5,614	12.01	674
WV	1,285	29.65	1,373	27.75	1,815	20.99	381
WI	3,672	19.74	4,423	16.39	5,201	13.94	725
WY	353	38.81	569	24.08	480	28.54	137
USA	182,709	22.99	203,568	20.64	267,744	15.69	42,013
PR	1,615	36.66	2,243	26.39	3,827	15.47	592

Note: 1998 data for state licensed drivers and registered vehicles not available at time of publication.

Note: The number shown for registered vehicles for the USA is approximately 4 percent lower than the sum of the registered vehicle numbers shown for the individual states, due to differing data sources.

Sources: FatalitiesFatalities Analysis Reporting System (FARS); Licensed Drivers (estimated)Federal Highway Administration; Registered Vehicles by State (estimated)Federal Highway Administration; Registered Vehicles for USAR-L. Polk & Co.; PopulationBureau of the Census.

Table 109
Persons Killed, by State and Person Type

State	Person Type										Total Killed	
	Driver		Passenger		Pedestrian		Pedalcyclist		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	726	67.8	259	24.2	79	7.4	5	0.5	2	0.2	1,071	100.0
AK	39	54.9	20	28.2	8	11.3	3	4.2	1	1.4	71	100.0
AZ	472	48.2	305	31.1	155	15.8	22	2.2	26	2.7	980	100.0
AR	398	63.7	171	27.4	47	7.5	5	0.8	4	0.6	625	100.0
CA	1,707	48.9	968	27.7	697	19.9	104	3.0	18	0.5	3,494	100.0
CO	370	58.9	177	28.2	73	11.6	4	0.6	4	0.6	628	100.0
CT	220	66.9	59	17.9	45	13.7	4	1.2	1	0.3	329	100.0
DE	79	68.7	18	15.7	15	13.0	3	2.6	0	0.0	115	100.0
DC	24	44.4	15	27.8	15	27.8	0	0.0	0	0.0	54	100.0
FL	1,552	55.0	631	22.3	531	18.8	98	3.5	12	0.4	2,824	100.0
GA	1,000	63.7	362	23.1	167	10.6	22	1.4	18	1.1	1,569	100.0
HI	71	59.2	25	20.8	23	19.2	1	0.8	0	0.0	120	100.0
ID	160	60.4	90	34.0	7	2.6	2	0.8	6	2.3	265	100.0
IL	831	59.7	332	23.8	187	13.4	34	2.4	9	0.6	1,393	100.0
IN	658	67.3	224	22.9	71	7.3	14	1.4	11	1.1	978	100.0
IA	290	64.6	124	27.6	25	5.6	7	1.6	3	0.7	449	100.0
KS	336	68.2	113	22.9	35	7.1	8	1.6	1	0.2	493	100.0
KY	566	66.0	217	25.3	61	7.1	10	1.2	4	0.5	858	100.0
LA	543	58.9	239	25.9	112	12.1	20	2.2	8	0.9	922	100.0
ME	127	66.1	46	24.0	13	6.8	4	2.1	2	1.0	192	100.0
MD	334	55.1	160	26.4	105	17.3	7	1.2	0	0.0	606	100.0
MA	226	55.7	83	20.4	84	20.7	8	2.0	5	1.2	406	100.0
MI	833	60.9	329	24.1	171	12.5	28	2.0	6	0.4	1,367	100.0
MN	403	62.0	180	27.7	55	8.5	9	1.4	3	0.5	650	100.0
MS	633	66.8	247	26.1	59	6.2	9	0.9	0	0.0	948	100.0
MO	732	62.6	318	27.2	102	8.7	9	0.8	8	0.7	1,169	100.0
MT	154	65.0	68	28.7	13	5.5	1	0.4	1	0.4	237	100.0
NE	192	61.0	91	28.9	21	6.7	7	2.2	4	1.3	315	100.0
NV	189	52.4	118	32.7	46	12.7	5	1.4	3	0.8	361	100.0
NH	90	70.3	24	18.8	11	8.6	2	1.6	1	0.8	128	100.0

Table 109
Persons Killed, by State and Person Type (Continued)

State	Person Type										Total Killed	
	Driver		Passenger		Pedestrian		Pedalcyclist		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	407	54.8	160	21.5	154	20.7	18	2.4	4	0.5	743	100.0
NM	214	50.5	149	35.1	58	13.7	3	0.7	0	0.0	424	100.0
NY	763	50.9	311	20.8	357	23.8	53	3.5	14	0.9	1,498	100.0
NC	980	61.4	375	23.5	197	12.3	44	2.8	0	0.0	1,596	100.0
ND	55	59.8	33	35.9	4	4.3	0	0.0	0	0.0	92	100.0
OH	920	64.7	338	23.8	134	9.4	17	1.2	13	0.9	1,422	100.0
OK	481	63.7	223	29.5	46	6.1	4	0.5	1	0.1	755	100.0
OR	307	57.1	156	29.0	66	12.3	8	1.5	1	0.2	538	100.0
PA	952	64.3	335	22.6	166	11.2	22	1.5	6	0.4	1,481	100.0
RI	43	58.1	18	24.3	11	14.9	1	1.4	1	1.4	74	100.0
SC	638	63.7	232	23.2	111	11.1	18	1.8	3	0.3	1,002	100.0
SD	105	63.6	47	28.5	7	4.2	2	1.2	4	2.4	165	100.0
TN	831	68.3	289	23.8	82	6.7	6	0.5	8	0.7	1,216	100.0
TX	2,077	58.1	962	26.9	461	12.9	57	1.6	20	0.6	3,577	100.0
UT	178	50.9	120	34.3	43	12.3	9	2.6	0	0.0	350	100.0
VT	58	55.8	34	32.7	11	10.6	1	1.0	0	0.0	104	100.0
VA	593	63.4	220	23.5	102	10.9	17	1.8	3	0.3	935	100.0
WA	397	60.2	178	27.0	75	11.4	10	1.5	0	0.0	660	100.0
WV	227	64.1	88	24.9	35	9.9	3	0.8	1	0.3	354	100.0
WI	452	63.3	186	26.1	63	8.8	11	1.5	2	0.3	714	100.0
WY	96	62.3	52	33.8	4	2.6	2	1.3	0	0.0	154	100.0
USA	24,729	59.6	10,519	25.4	5,220	12.6	761	1.8	242	0.6	41,471	100.0
PR	231	41.4	109	19.5	191	34.2	24	4.3	3	0.5	558	100.0

Table 110
Persons Killed, by State and Age Group

State	Age Group (Years)											Unknown	Total Killed
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74		
AL	21	18	40	162	91	192	183	114	86	80	84	0	1,071
AK	2	1	5	14	7	12	13	10	3	4	0	0	71
AZ	28	21	28	115	84	169	173	113	79	87	79	4	980
AR	9	10	24	90	57	97	103	78	53	43	60	1	625
CA	74	70	128	448	341	586	567	398	299	241	330	12	3,494
CO	11	8	18	89	58	115	111	93	48	43	34	0	628
CT	2	3	2	38	33	74	47	36	23	25	46	0	329
DE	0	5	1	18	7	23	20	10	9	9	13	0	115
DC	1	2	1	4	5	14	12	2	5	5	3	0	54
FL	42	43	76	297	243	440	469	336	238	251	380	9	2,824
GA	38	30	55	209	118	272	273	202	117	107	143	5	1,569
HI	0	2	3	19	11	28	14	11	11	7	14	0	120
ID	10	7	17	40	24	40	34	28	22	16	27	0	265
IL	24	27	50	199	162	240	202	154	99	111	124	1	1,393
IN	19	18	31	159	89	146	170	95	81	75	93	2	978
IA	6	10	15	68	34	67	56	47	35	44	67	0	449
KS	10	13	21	59	48	85	87	60	28	36	46	0	493
KY	20	16	23	133	73	146	140	103	58	61	85	0	858
LA	23	18	27	135	80	154	173	115	75	56	62	4	922
ME	0	2	5	33	24	21	27	21	9	22	28	0	192
MD	6	13	19	82	41	106	110	64	57	38	67	3	606
MA	3	3	8	75	34	77	45	39	33	32	57	0	406
MI	23	30	58	174	117	224	219	169	100	99	153	1	1,367
MN	7	15	26	107	59	90	89	75	46	52	84	0	650
MS	19	22	27	123	88	172	146	117	79	76	77	2	948
MO	29	26	36	176	100	187	188	128	100	87	112	0	1,169
MT	3	2	10	30	20	32	40	33	19	21	27	0	237
NE	7	9	15	43	27	39	51	33	31	21	39	0	315
NV	8	6	14	40	35	58	64	44	35	29	28	0	361
NH	0	0	3	19	18	24	18	6	13	11	16	0	128

Table 110
Persons Killed, by State and Age Group (Continued)

State	Age Group (Years)											Unknown	Total Killed
	<5	5-9	10-15	16-20	21-24	25-34	35-44	45-54	55-64	65-74	>74		
NJ	10	11	19	86	77	103	104	82	55	90	98	8	743
NM	4	10	25	49	34	88	74	42	39	30	29	0	424
NY	15	28	40	171	107	224	207	178	142	134	234	18	1,498
NC	25	30	62	219	142	288	265	178	114	123	147	3	1,596
ND	2	1	6	17	7	17	18	5	3	5	11	0	92
OH	26	41	50	217	140	253	223	150	88	100	133	1	1,422
OK	18	20	33	108	60	123	117	77	63	63	71	2	755
OR	10	7	18	86	64	74	90	62	25	52	50	0	538
PA	14	31	49	241	136	219	210	168	103	100	205	5	1,481
RI	0	1	3	10	10	16	5	7	6	5	11	0	74
SC	14	19	39	110	94	219	179	145	59	57	66	1	1,002
SD	7	1	16	26	17	23	22	20	6	15	12	0	165
TN	22	26	30	190	112	225	185	138	96	90	101	1	1,216
TX	88	70	142	512	337	606	609	418	260	253	264	18	3,577
UT	16	10	16	67	24	42	50	40	30	17	35	3	350
VT	2	3	2	20	10	19	14	11	6	2	15	0	104
VA	19	15	32	111	91	155	159	108	73	73	98	1	935
WA	6	6	22	93	80	108	104	99	45	43	54	0	660
WV	3	5	9	50	33	63	73	35	27	23	33	0	354
WI	10	9	29	124	56	109	116	59	58	60	84	0	714
WY	1	2	9	22	10	24	28	29	13	8	8	0	154
USA	757	796	1,437	5,727	3,769	6,928	6,696	4,785	3,202	3,132	4,137	105	41,471
PR	9	5	21	67	63	87	85	61	63	51	40	6	558

Table 111
Occupants Killed, by State and Vehicle Type

State	Vehicle Type												Unknown		Total Occupants Killed	
	Passenger Cars		Light Trucks		Large Trucks		Motorcycles		Buses		Other Vehicles					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	605	61.4	307	31.1	29	2.9	34	3.4	3	0.3	7	0.7	1	0.1	986	100.0
AK	27	45.0	26	43.3	0	0.0	5	8.3	0	0.0	2	3.3	0	0.0	60	100.0
AZ	372	46.6	312	39.1	14	1.8	60	7.5	0	0.0	16	2.0	24	3.0	798	100.0
AR	305	53.3	217	37.9	14	2.4	28	4.9	1	0.2	6	1.0	1	0.2	572	100.0
CA	1,606	59.9	794	29.6	52	1.9	204	7.6	3	0.1	21	0.8	0	0.0	2,680	100.0
CO	276	50.4	201	36.7	11	2.0	56	10.2	0	0.0	4	0.7	0	0.0	548	100.0
CT	186	66.7	44	15.8	8	2.9	41	14.7	0	0.0	0	0.0	0	0.0	279	100.0
DE	67	69.1	21	21.6	2	2.1	6	6.2	0	0.0	1	1.0	0	0.0	97	100.0
DC	28	71.8	4	10.3	0	0.0	5	12.8	0	0.0	0	0.0	2	5.1	39	100.0
FL	1,402	64.2	538	24.6	40	1.8	183	8.4	1	0.0	17	0.8	2	0.1	2,183	100.0
GA	808	58.8	455	33.1	24	1.7	66	4.8	0	0.0	20	1.5	2	0.1	1,375	100.0
HI	47	49.0	27	28.1	1	1.0	21	21.9	0	0.0	0	0.0	0	0.0	96	100.0
ID	130	51.4	110	43.5	4	1.6	6	2.4	0	0.0	1	0.4	2	0.8	253	100.0
IL	744	64.0	282	24.2	25	2.1	99	8.5	1	0.1	12	1.0	0	0.0	1,163	100.0
IN	550	62.0	239	26.9	21	2.4	69	7.8	0	0.0	6	0.7	2	0.2	887	100.0
IA	253	60.8	128	30.8	5	1.2	28	6.7	0	0.0	2	0.5	0	0.0	416	100.0
KS	241	53.7	167	37.2	10	2.2	19	4.2	0	0.0	11	2.4	1	0.2	449	100.0
KY	489	62.5	234	29.9	13	1.7	32	4.1	0	0.0	14	1.8	1	0.1	783	100.0
LA	449	57.2	271	34.5	23	2.9	35	4.5	0	0.0	6	0.8	1	0.1	785	100.0
ME	111	64.2	39	22.5	4	2.3	15	8.7	0	0.0	4	2.3	0	0.0	173	100.0
MD	348	70.4	105	21.3	4	0.8	35	7.1	0	0.0	2	0.4	0	0.0	494	100.0
MA	212	68.6	59	19.1	2	0.6	33	10.7	0	0.0	1	0.3	2	0.6	309	100.0
MI	748	64.4	318	27.4	10	0.9	56	4.8	2	0.2	28	2.4	0	0.0	1,162	100.0
MN	355	60.8	164	28.1	11	1.9	41	7.0	0	0.0	13	2.2	0	0.0	584	100.0
MS	534	60.7	286	32.5	18	2.0	18	2.0	0	0.0	8	0.9	16	1.8	880	100.0
MO	635	60.3	360	34.2	23	2.2	28	2.7	1	0.1	5	0.5	1	0.1	1,053	100.0
MT	98	43.9	97	43.5	8	3.6	14	6.3	0	0.0	6	2.7	0	0.0	223	100.0
NE	164	57.3	104	36.4	8	2.8	6	2.1	0	0.0	4	1.4	0	0.0	286	100.0
NV	162	52.3	125	40.3	6	1.9	13	4.2	0	0.0	3	1.0	1	0.3	310	100.0
NH	75	65.2	20	17.4	1	0.9	17	14.8	0	0.0	2	1.7	0	0.0	115	100.0

Table 111
Occupants Killed, by State and Vehicle Type (Continued)

State	Vehicle Type												Unknown		Total Occupants Killed	
	Passenger Cars		Light Trucks		Large Trucks		Motorcycles		Buses		Other Vehicles					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	352	62.1	99	17.5	7	1.2	32	5.6	8	1.4	2	0.4	67	11.8	567	100.0
NM	176	48.5	152	41.9	8	2.2	21	5.8	2	0.6	4	1.1	0	0.0	363	100.0
NY	716	66.2	219	20.3	12	1.1	108	10.0	1	0.1	16	1.5	9	0.8	1,081	100.0
NC	884	65.2	347	25.6	36	2.7	83	6.1	0	0.0	5	0.4	0	0.0	1,355	100.0
ND	45	51.1	36	40.9	3	3.4	3	3.4	0	0.0	1	1.1	0	0.0	88	100.0
OH	802	63.4	314	24.8	22	1.7	118	9.3	0	0.0	8	0.6	0	0.0	1,264	100.0
OK	366	52.0	289	41.1	19	2.7	25	3.6	0	0.0	5	0.7	0	0.0	704	100.0
OR	263	56.8	159	34.3	12	2.6	25	5.4	0	0.0	4	0.9	0	0.0	463	100.0
PA	849	65.8	272	21.1	38	2.9	111	8.6	8	0.6	13	1.0	0	0.0	1,291	100.0
RI	47	75.8	9	14.5	0	0.0	5	8.1	0	0.0	1	1.6	0	0.0	62	100.0
SC	531	61.0	235	27.0	17	2.0	73	8.4	0	0.0	2	0.2	12	1.4	870	100.0
SD	88	56.4	56	35.9	2	1.3	9	5.8	0	0.0	1	0.6	0	0.0	156	100.0
TN	719	63.8	334	29.6	19	1.7	42	3.7	2	0.2	11	1.0	0	0.0	1,127	100.0
TX	1,614	53.0	1,184	38.9	76	2.5	151	5.0	3	0.1	19	0.6	0	0.0	3,047	100.0
UT	158	53.0	110	36.9	12	4.0	14	4.7	0	0.0	3	1.0	1	0.3	298	100.0
VT	61	66.3	24	26.1	1	1.1	4	4.3	0	0.0	2	2.2	0	0.0	92	100.0
VA	487	59.7	252	30.9	21	2.6	42	5.1	0	0.0	5	0.6	9	1.1	816	100.0
WA	353	61.4	160	27.8	11	1.9	51	8.9	0	0.0	0	0.0	0	0.0	575	100.0
WV	191	60.4	92	29.1	6	1.9	21	6.6	0	0.0	6	1.9	0	0.0	316	100.0
WI	377	59.1	177	27.7	6	0.9	65	10.2	0	0.0	13	2.0	0	0.0	638	100.0
WY	58	39.2	73	49.3	9	6.1	8	5.4	0	0.0	0	0.0	0	0.0	148	100.0
USA	21,164	59.9	10,647	30.1	728	2.1	2,284	6.5	36	0.1	343	1.0	157	0.4	35,359	100.0
PR	253	74.4	55	16.2	3	0.9	27	7.9	1	0.3	0	0.0	1	0.3	340	100.0

Table 112
Passenger Car Occupants Killed, by State and Restraint Use

State	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	203	33.6	378	62.5	24	4.0	605	100.0
AK	14	51.9	13	48.1	0	0.0	27	100.0
AZ	139	37.4	193	51.9	40	10.8	372	100.0
AR	93	30.5	184	60.3	28	9.2	305	100.0
CA	868	54.0	516	32.1	222	13.8	1,606	100.0
CO	134	48.6	140	50.7	2	0.7	276	100.0
CT	53	28.5	110	59.1	23	12.4	186	100.0
DE	22	32.8	43	64.2	2	3.0	67	100.0
DC	7	25.0	16	57.1	5	17.9	28	100.0
FL	595	42.4	775	55.3	32	2.3	1,402	100.0
GA	374	46.3	327	40.5	107	13.2	808	100.0
HI	30	63.8	10	21.3	7	14.9	47	100.0
ID	45	34.6	77	59.2	8	6.2	130	100.0
IL	242	32.5	339	45.6	163	21.9	744	100.0
IN	215	39.1	286	52.0	49	8.9	550	100.0
IA	111	43.9	91	36.0	51	20.2	253	100.0
KS	82	34.0	134	55.6	25	10.4	241	100.0
KY	170	34.8	303	62.0	16	3.3	489	100.0
LA	156	34.7	231	51.4	62	13.8	449	100.0
ME	56	50.5	52	46.8	3	2.7	111	100.0
MD	185	53.2	143	41.1	20	5.7	348	100.0
MA	55	25.9	105	49.5	52	24.5	212	100.0
MI	318	42.5	333	44.5	97	13.0	748	100.0
MN	129	36.3	174	49.0	52	14.6	355	100.0
MS	151	28.3	367	68.7	16	3.0	534	100.0
MO	234	36.9	313	49.3	88	13.9	635	100.0
MT	36	36.7	56	57.1	6	6.1	98	100.0
NE	46	28.0	102	62.2	16	9.8	164	100.0
NV	69	42.6	85	52.5	8	4.9	162	100.0
NH	22	29.3	50	66.7	3	4.0	75	100.0

Table 112
Passenger Car Occupants Killed, by State and Restraint Use (Continued)

State	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	137	38.9	203	57.7	12	3.4	352	100.0
NM	77	43.8	93	52.8	6	3.4	176	100.0
NY	311	43.4	305	42.6	100	14.0	716	100.0
NC	434	49.1	338	38.2	112	12.7	884	100.0
ND	11	24.4	31	68.9	3	6.7	45	100.0
OH	268	33.4	493	61.5	41	5.1	802	100.0
OK	139	38.0	225	61.5	2	0.5	366	100.0
OR	159	60.5	80	30.4	24	9.1	263	100.0
PA	271	31.9	436	51.4	142	16.7	849	100.0
RI	8	17.0	39	83.0	0	0.0	47	100.0
SC	202	38.0	327	61.6	2	0.4	531	100.0
SD	22	25.0	58	65.9	8	9.1	88	100.0
TN	207	28.8	480	66.8	32	4.5	719	100.0
TX	836	51.8	748	46.3	30	1.9	1,614	100.0
UT	50	31.6	102	64.6	6	3.8	158	100.0
VT	20	32.8	39	63.9	2	3.3	61	100.0
VA	185	38.0	249	51.1	53	10.9	487	100.0
WA	153	43.3	185	52.4	15	4.2	353	100.0
WV	58	30.4	118	61.8	15	7.9	191	100.0
WI	141	37.4	206	54.6	30	8.0	377	100.0
WY	17	29.3	41	70.7	0	0.0	58	100.0
USA	8,560	40.4	10,742	50.8	1,862	8.8	21,164	100.0
PR	55	21.7	198	78.3	0	0.0	253	100.0

Table 113
1998 Ranking of State Pedestrian Fatality Rates

Rank	State	Pedestrians Killed	Population (Thousands)	Pedestrian Fatality Rate per 100,000 Population
1	Florida	531	14,916	3.56
2	New Mexico	58	1,737	3.34
3	Arizona	155	4,669	3.32
4	South Carolina	111	3,836	2.89
5	District of Columbia	15	523	2.87
6	Nevada	46	1,747	2.63
7	North Carolina	197	7,546	2.61
8	Louisiana	112	4,369	2.56
9	Texas	461	19,760	2.33
10	Georgia	167	7,642	2.19
11	Mississippi	59	2,752	2.14
12	California	697	32,667	2.13
13	Utah	43	2,100	2.05
14	Maryland	105	5,135	2.04
15	Delaware	15	744	2.02
16	Oregon	66	3,282	2.01
17	New York	357	18,175	1.96
18	Hawaii	23	1,193	1.93
19	West Virginia	35	1,811	1.93
20	New Jersey	154	8,115	1.90
21	Missouri	102	5,439	1.88
22	Vermont	11	591	1.86
23	Arkansas	47	2,538	1.85
24	Colorado	73	3,971	1.84
25	Alabama	79	4,352	1.82
26	Michigan	171	9,817	1.74
27	Illinois	187	12,045	1.55
28	Kentucky	61	3,936	1.55

Table 113
1998 Ranking of State Pedestrian Fatality Rates (Continued)

Rank	State	Pedestrians Killed	Population (Thousands)	Pedestrian Fatality Rate per 100,000 Population
29	Tennessee	82	5,431	1.51
30	Virginia	102	6,791	1.50
31	Montana	13	880	1.48
32	Pennsylvania	166	12,001	1.38
33	Connecticut	45	3,274	1.37
34	Massachusetts	84	6,147	1.37
35	Oklahoma	46	3,347	1.37
36	Kansas	35	2,629	1.33
37	Washington	75	5,689	1.32
38	Alaska	8	614	1.30
39	Nebraska	21	1,663	1.26
40	Wisconsin	63	5,224	1.21
41	Indiana	71	5,899	1.20
42	Ohio	134	11,209	1.20
43	Minnesota	55	4,725	1.16
44	Rhode Island	11	988	1.11
45	Maine	13	1,244	1.05
46	South Dakota	7	738	0.95
47	New Hampshire	11	1,185	0.93
48	Iowa	25	2,862	0.87
49	Wyoming	4	481	0.83
50	North Dakota	4	638	0.63
51	Idaho	7	1,229	0.57
	USA	5,220	270,299	1.93
	Puerto Rico	191	3,827	4.99

Table 114
Persons Killed, by State and Highest Blood Alcohol Concentration in the Crash

State	Highest Blood Alcohol Concentration in Crash						Total Killed in Alcohol-Related Crashes		Total Killed	
	BAC = 0.00		BAC = 0.01-0.09		BAC = 0.10+		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
AL	665	62	77	7	329	31	406	38	1,071	100
AK	40	56	3	4	28	39	31	44	71	100
AZ	557	57	89	9	334	34	423	43	980	100
AR	432	69	48	8	146	23	193	31	625	100
CA	2,170	62	315	9	1,009	29	1,324	38	3,494	100
CO	396	63	43	7	189	30	232	37	628	100
CT	187	57	29	9	112	34	142	43	329	100
DE	70	61	7	6	37	33	45	39	115	100
DC	27	49	8	16	19	35	27	51	54	100
FL	1,899	67	210	7	715	25	925	33	2,824	100
GA	1,060	68	130	8	380	24	509	32	1,569	100
HI	64	53	14	12	42	35	56	47	120	100
ID	175	66	15	6	75	28	90	34	265	100
IL	794	57	122	9	477	34	599	43	1,393	100
IN	599	61	72	7	307	31	379	39	978	100
IA	285	64	43	9	121	27	164	36	449	100
KS	319	65	42	8	132	27	174	35	493	100
KY	573	67	60	7	225	26	285	33	858	100
LA	496	54	103	11	323	35	426	46	922	100
ME	138	72	8	4	45	24	54	28	192	100
MD	403	66	59	10	144	24	203	34	606	100
MA	214	53	59	15	134	33	192	47	406	100
MI	831	61	120	9	416	30	536	39	1,367	100
MN	370	57	64	10	216	33	280	43	650	100
MS	597	63	57	6	294	31	351	37	948	100
MO	644	55	139	12	386	33	525	45	1,169	100
MT	133	56	23	10	81	34	104	44	237	100
NE	196	62	31	10	88	28	119	38	315	100
NV	184	51	49	14	127	35	177	49	361	100
NH	67	53	25	20	36	28	61	47	128	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 114
Persons Killed, by State and Highest Blood Alcohol Concentration in the Crash (Continued)

State	Highest Blood Alcohol Concentration in Crash						Total Killed in Alcohol-Related Crashes		Total Killed	
	BAC = 0.00		BAC = 0.01-0.09		BAC = 0.10+		Number	Percent	Number	Percent
	Number	Percent	Number	Percent	Number	Percent				
NJ	472	64	77	10	194	26	271	36	743	100
NM	231	55	41	10	152	36	193	45	424	100
NY	1,133	76	115	8	250	17	365	24	1,498	100
NC	1,083	68	91	6	422	26	513	32	1,596	100
ND	48	53	4	4	40	43	44	47	92	100
OH	958	67	83	6	381	27	464	33	1,422	100
OK	503	67	44	6	208	28	252	33	755	100
OR	305	57	50	9	183	34	233	43	538	100
PA	862	58	103	7	516	35	619	42	1,481	100
RI	39	52	9	13	26	35	35	48	74	100
SC	698	70	50	5	254	25	304	30	1,002	100
SD	98	59	13	8	54	33	67	41	165	100
TN	717	59	105	9	394	32	499	41	1,216	100
TX	1,785	50	383	11	1,408	39	1,792	50	3,577	100
UT	300	86	12	3	39	11	50	14	350	100
VT	66	63	7	7	31	30	38	37	104	100
VA	592	63	76	8	267	29	343	37	935	100
WA	353	54	62	9	244	37	307	46	660	100
WV	209	59	17	5	128	36	145	41	354	100
WI	412	58	58	8	244	34	302	42	714	100
WY	86	56	13	8	55	36	68	44	154	100
USA	25,536	62	3,479	8	12,456	30	15,935	38	41,471	100
PR	271	49	78	14	209	37	287	51	558	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 115
Drivers Involved in Fatal Crashes, by State
and Blood Alcohol Concentration of the Driver

State	Blood Alcohol Concentration of Driver								Total Drivers Involved in Fatal Crashes	
	No Alcohol (BAC = 0.00)		Low Alcohol (BAC = 0.01-0.09)		High Alcohol (BAC = 0.10+)		Any Alcohol (BAC = 0.01+)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	1,104	76	67	5	287	20	354	24	1,458	100
AK	60	70	3	4	22	26	26	30	86	100
AZ	961	76	77	6	227	18	305	24	1,266	100
AR	670	81	39	5	123	15	162	19	832	100
CA	3,744	79	265	6	716	15	981	21	4,725	100
CO	651	77	41	5	153	18	194	23	845	100
CT	324	71	29	6	100	22	129	29	453	100
DE	136	80	9	5	25	14	34	20	170	100
DC	53	68	10	13	15	19	24	32	77	100
FL	3,400	83	191	5	509	12	700	17	4,100	100
GA	1,764	81	112	5	304	14	416	19	2,180	100
HI	126	71	14	8	37	21	51	29	177	100
ID	253	78	14	4	57	17	71	22	324	100
IL	1,450	75	100	5	387	20	487	25	1,937	100
IN	1,033	76	78	6	255	19	334	24	1,367	100
IA	498	77	41	6	104	16	145	23	643	100
KS	506	76	41	6	116	18	157	24	663	100
KY	952	80	50	4	186	16	236	20	1,188	100
LA	897	71	99	8	259	21	358	29	1,255	100
ME	205	81	9	4	39	15	48	19	253	100
MD	706	82	50	6	108	12	158	18	864	100
MA	386	69	60	11	111	20	172	31	558	100
MI	1,546	77	122	6	342	17	464	23	2,010	100
MN	656	74	62	7	173	19	235	26	891	100
MS	926	74	61	5	264	21	325	26	1,251	100
MO	1,120	72	130	8	313	20	443	28	1,563	100
MT	187	68	18	7	69	25	87	32	274	100
NE	292	73	31	8	76	19	107	27	399	100
NV	332	70	55	12	90	19	146	30	478	100
NH	123	72	21	12	26	16	47	28	170	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 115
Drivers Involved in Fatal Crashes, by State
and Blood Alcohol Concentration of the Driver (Continued)

State	Blood Alcohol Concentration of Driver								Total Drivers Involved in Fatal Crashes	
	No Alcohol (BAC = 0.00)		Low Alcohol (BAC = 0.01-0.09)		High Alcohol (BAC = 0.10+)		Any Alcohol (BAC = 0.01+)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	793	78	76	7	150	15	226	22	1,019	100
NM	361	71	38	8	109	21	147	29	508	100
NY	1,743	86	85	4	205	10	290	14	2,033	100
NC	1,842	83	73	3	293	13	366	17	2,208	100
ND	71	65	5	5	33	30	38	35	109	100
OH	1,570	80	78	4	323	16	401	20	1,971	100
OK	774	78	42	4	171	17	212	22	986	100
OR	522	73	47	7	145	20	193	27	715	100
PA	1,503	74	95	5	443	22	538	26	2,041	100
RI	65	68	6	7	24	25	31	32	96	100
SC	1,114	82	43	3	195	14	237	18	1,351	100
SD	154	73	13	6	46	22	58	27	212	100
TN	1,264	74	96	6	339	20	435	26	1,699	100
TX	3,276	68	417	9	1,156	24	1,573	32	4,849	100
UT	402	91	10	2	31	7	41	9	443	100
VT	91	74	6	5	26	21	32	26	123	100
VA	946	77	70	6	207	17	278	23	1,224	100
WA	649	72	57	6	197	22	254	28	903	100
WV	344	74	16	3	105	23	122	26	466	100
WI	697	73	60	6	201	21	261	27	958	100
WY	114	66	10	6	48	28	58	34	172	100
USA	43,358	77	3,244	6	9,942	18	13,185	23	56,543	100
PR	494	69	74	10	145	20	219	31	713	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 116
Drivers Killed in Fatal Crashes, by State
and Blood Alcohol Concentration of the Driver

State	Blood Alcohol Concentration of Driver								Total Drivers Killed	
	No Alcohol (BAC = 0.00)		Low Alcohol (BAC = 0.01-0.09)		High Alcohol (BAC = 0.10+)		Any Alcohol (BAC = 0.01+)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	463	64	39	5	224	31	263	36	726	100
AK	26	68	1	3	11	29	13	32	39	100
AZ	313	66	32	7	127	27	159	34	472	100
AR	281	71	22	6	95	24	117	29	398	100
CA	1,118	66	133	8	456	27	589	34	1,707	100
CO	237	64	21	6	112	30	133	36	370	100
CT	135	62	13	6	72	33	85	38	220	100
DE	57	72	4	5	18	23	22	28	79	100
DC	16	67	2	7	6	26	8	33	24	100
FL	1,120	72	87	6	345	22	432	28	1,552	100
GA	700	70	65	6	236	24	300	30	1,000	100
HI	35	49	6	8	30	43	36	51	71	100
ID	111	69	5	3	44	28	49	31	160	100
IL	507	61	58	7	265	32	324	39	831	100
IN	429	65	39	6	190	29	229	35	658	100
IA	201	69	16	6	73	25	89	31	290	100
KS	223	66	23	7	90	27	113	34	336	100
KY	390	69	29	5	147	26	176	31	566	100
LA	312	57	40	7	191	35	231	43	543	100
ME	94	74	3	3	30	23	33	26	127	100
MD	241	72	25	7	69	21	93	28	334	100
MA	128	57	27	12	71	31	98	43	226	100
MI	521	63	59	7	253	30	312	37	833	100
MN	247	61	31	8	125	31	156	39	403	100
MS	406	64	28	4	200	32	227	36	633	100
MO	472	64	51	7	209	29	260	36	732	100
MT	89	58	13	9	52	33	65	42	154	100
NE	113	59	19	10	60	31	79	41	192	100
NV	114	60	18	9	57	30	75	40	189	100
NH	50	56	18	20	22	25	40	44	90	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 116
Drivers Killed in Fatal Crashes, by State
and Blood Alcohol Concentration of the Driver (Continued)

State	Blood Alcohol Concentration of Driver								Total Drivers Killed	
	No Alcohol (BAC = 0.00)		Low Alcohol (BAC = 0.01-0.09)		High Alcohol (BAC = 0.10+)		Any Alcohol (BAC = 0.01+)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	293	72	31	8	83	20	114	28	407	100
NM	122	57	19	9	73	34	92	43	214	100
NY	582	76	52	7	129	17	181	24	763	100
NC	740	76	35	4	205	21	240	24	980	100
ND	28	51	3	6	23	43	27	49	55	100
OH	640	70	42	5	238	26	280	30	920	100
OK	332	69	19	4	130	27	149	31	481	100
OR	188	61	25	8	94	31	119	39	307	100
PA	582	61	50	5	320	34	370	39	952	100
RI	23	53	3	7	17	40	20	47	43	100
SC	458	72	26	4	154	24	180	28	638	100
SD	66	63	5	5	34	32	39	37	105	100
TN	507	61	56	7	268	32	324	39	831	100
TX	1,189	57	140	7	748	36	888	43	2,077	100
UT	155	87	3	1	21	12	23	13	178	100
VT	37	64	4	6	17	30	21	36	58	100
VA	392	66	46	8	155	26	201	34	593	100
WA	222	56	24	6	150	38	175	44	397	100
WV	138	61	9	4	80	35	89	39	227	100
WI	272	60	29	6	151	33	180	40	452	100
WY	50	52	6	7	40	42	46	48	96	100
USA	16,166	65	1,553	6	7,010	28	8,563	35	24,729	100
PR	125	54	28	12	78	34	106	46	231	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 117
Surviving Drivers in Fatal Crashes, by State
and Blood Alcohol Concentration of the Driver

State	Blood Alcohol Concentration of Driver								Total Surviving Drivers in Fatal Crashes	
	No Alcohol (BAC = 0.00)		Low Alcohol (BAC = 0.01-0.09)		High Alcohol (BAC = 0.10+)		Any Alcohol (BAC = 0.01+)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
AL	641	88	28	4	63	9	91	12	732	100
AK	34	72	2	5	11	23	13	28	47	100
AZ	648	82	45	6	101	13	146	18	794	100
AR	389	90	17	4	28	6	45	10	434	100
CA	2,625	87	133	4	260	9	393	13	3,018	100
CO	414	87	20	4	41	9	61	13	475	100
CT	188	81	17	7	28	12	45	19	233	100
DE	79	87	5	6	7	7	12	13	91	100
DC	37	69	8	15	8	16	16	31	53	100
FL	2,280	89	104	4	164	6	268	11	2,548	100
GA	1,064	90	47	4	68	6	116	10	1,180	100
HI	91	86	8	8	7	7	15	14	106	100
ID	142	87	10	6	13	8	22	13	164	100
IL	943	85	42	4	121	11	163	15	1,106	100
IN	604	85	39	6	66	9	105	15	709	100
IA	298	84	24	7	31	9	55	16	353	100
KS	283	86	19	6	26	8	44	14	327	100
KY	562	90	21	3	39	6	60	10	622	100
LA	585	82	59	8	67	9	127	18	712	100
ME	111	88	6	5	9	7	15	12	126	100
MD	465	88	26	5	39	7	65	12	530	100
MA	258	78	34	10	40	12	74	22	332	100
MI	1,024	87	63	5	89	8	153	13	1,177	100
MN	409	84	31	6	48	10	79	16	488	100
MS	520	84	34	5	64	10	98	16	618	100
MO	648	78	79	9	104	13	183	22	831	100
MT	98	81	5	4	17	14	22	19	120	100
NE	179	87	12	6	16	8	28	13	207	100
NV	219	76	38	13	33	11	70	24	289	100
NH	73	91	3	4	4	5	7	9	80	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 117
Surviving Drivers in Fatal Crashes, by State
and Blood Alcohol Concentration of the Driver (Continued)

State	Blood Alcohol Concentration of Driver								Total Surviving Drivers in Fatal Crashes	
	No Alcohol (BAC = 0.00)		Low Alcohol (BAC = 0.01-0.09)		High Alcohol (BAC = 0.10+)		Any Alcohol (BAC = 0.01+)			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
NJ	501	82	44	7	67	11	111	18	612	100
NM	238	81	19	7	36	12	56	19	294	100
NY	1,161	91	32	3	76	6	109	9	1,270	100
NC	1,102	90	38	3	88	7	126	10	1,228	100
ND	43	79	2	4	9	17	11	21	54	100
OH	931	89	36	3	85	8	120	11	1,051	100
OK	442	87	23	4	41	8	63	13	505	100
OR	334	82	23	6	52	13	74	18	408	100
PA	922	85	45	4	123	11	167	15	1,089	100
RI	42	80	3	6	7	14	11	20	53	100
SC	656	92	16	2	41	6	57	8	713	100
SD	88	82	7	7	12	11	19	18	107	100
TN	757	87	40	5	71	8	111	13	868	100
TX	2,086	75	277	10	408	15	686	25	2,772	100
UT	247	93	8	3	10	4	18	7	265	100
VT	54	83	2	4	9	13	11	17	65	100
VA	555	88	24	4	52	8	76	12	631	100
WA	427	84	33	6	46	9	79	16	506	100
WV	207	86	7	3	25	11	32	14	239	100
WI	425	84	30	6	51	10	81	16	506	100
WY	64	85	3	4	8	11	12	15	76	100
USA	27,192	85	1,691	5	2,931	9	4,622	15	31,814	100
PR	368	76	46	10	67	14	114	24	482	100

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown. For more information, see page 7 of this report.

Table 118
Speeding-Related Traffic Fatalities and Costs by Road Type and Speed Limit

State	Total Traffic Fatalities	Speeding-Related Fatalities by Road Type and Speed Limit									Estimated Costs of Speeding-Related Crashes by Road Type (Million 1994 Dollars)		
		Total	Interstate		Non-Interstate						Total	Interstate	Non-Interstate
			>55 mph	≤55 mph	55 mph	50 mph	45 mph	40 mph	35 mph	<35 mph			
AL	1,071	387	42	3	96	10	108	32	49	30	447	59	389
AK	71	23	0	6	6	0	3	2	1	4	57	11	46
AZ	980	400	74	15	83	21	52	37	34	32	571	108	463
AR	625	149	14	4	83	0	15	10	6	8	246	34	212
CA	3,494	1,145	170	17	315	49	85	86	123	126	2,790	425	2,364
CO	628	258	19	22	41	13	31	21	25	38	420	64	355
CT	329	92	1	17	10	3	10	9	8	34	371	59	312
DE	115	22	0	1	1	5	1	8	2	2	62	7	55
DC	54	25	0	3	0	0	5	0	2	15	93	13	80
FL	2,824	612	70	15	102	19	113	35	60	69	1,507	229	1,278
GA	1,569	332	22	13	115	8	67	16	43	21	744	101	643
HI	120	45	0	4	8	0	5	0	8	19	120	15	105
ID	265	59	13	0	7	10	5	1	5	2	93	17	76
IL	1,393	453	52	40	191	1	44	15	65	45	1,167	194	974
IN	978	200	8	10	63	11	15	19	15	30	486	65	421
IA	449	60	2	0	37	2	3	1	2	9	202	25	178
KS	493	133	13	1	50	2	4	6	9	14	240	31	209
KY	858	204	10	6	148	1	9	2	19	5	373	46	328
LA	922	158	9	4	70	4	32	5	15	11	435	57	378
ME	192	80	4	1	5	16	25	13	7	7	139	15	124
MD	606	211	5	8	31	20	12	40	23	36	614	76	538
MA	406	150	12	3	10	3	9	22	21	68	692	95	598
MI	1,367	349	27	5	182	7	21	15	28	42	952	131	821
MN	650	152	8	10	78	8	10	6	1	23	344	47	297
MS	948	219	26	0	75	34	39	1	17	12	259	35	224
MO	1,169	425	62	15	151	4	28	10	38	37	659	108	551
MT	237	113	6	1	29	0	6	0	4	9	117	17	100
NE	315	60	5	1	9	20	0	0	9	3	149	20	129
NV	361	138	38	2	8	7	19	4	16	13	235	52	182
NH	128	39	0	0	1	4	3	7	5	14	85	7	77

Table 118
Speeding-Related Traffic Fatalities and Costs by Road Type and Speed Limit (Continued)

State	Total Traffic Fatalities	Speeding-Related Fatalities by Road Type and Speed Limit									Estimated Costs of Speeding-Related Crashes by Road Type (Million 1994 Dollars)		
		Total	Interstate		Non-Interstate						Total	Interstate	Non-Interstate
			>55 mph	≤55 mph	55 mph	50 mph	45 mph	40 mph	35 mph	<35 mph			
NJ	743	75	1	9	5	9	12	6	6	23	966	141	825
NM	424	142	27	7	27	10	9	5	12	10	211	39	172
NY	1,498	402	7	17	135	2	41	40	21	77	2,153	288	1,866
NC	1,596	554	41	21	302	6	106	6	56	10	963	127	836
ND	92	47	3	1	30	0	1	3	2	3	56	6	49
OH	1,422	385	49	2	200	8	22	12	43	32	1,222	175	1,047
OK	755	310	40	1	71	6	51	16	8	18	394	55	339
OR	538	182	8	4	114	1	17	8	16	13	296	32	264
PA	1,481	504	30	29	127	14	100	69	88	36	1,059	143	915
RI	74	33	5	3	0	4	2	2	1	16	88	16	72
SC	1,002	474	58	16	155	9	83	27	48	17	530	89	441
SD	165	66	4	1	22	3	2	3	6	5	84	9	75
TN	1,216	307	19	10	93	20	59	37	29	35	540	68	473
TX	3,577	1,378	202	51	222	36	85	65	105	114	2,353	390	1,963
UT	350	87	33	0	12	6	1	7	6	6	158	37	121
VT	104	51	10	1	0	20	2	6	11	1	61	12	50
VA	935	200	24	17	90	1	31	4	22	9	552	92	460
WA	660	246	33	0	26	34	20	12	63	30	614	87	526
WV	354	75	3	0	26	0	7	12	13	9	162	19	144
WI	714	194	13	1	110	0	8	5	16	27	438	54	384
WY	154	72	9	0	5	1	13	2	3	6	80	11	69
USA*	41,471	12,477	1,331	418	3,777	472	1,451	770	1,235	1,275	27,650	4,053	23,596
PR	558	266	0	61	3	10	64	28	78	22	652	166	485

*Of the total number of speeding-related fatalities in 1998, 5,911 occurred on roads with posted speed limits between 55 and 65 mph, and 827 occurred on roads with speed limits above 65 mph.

Notes: Totals may not equal sum of components due to independent rounding. The total column for speeding-related fatalities includes fatalities that occurred on roads for which the speed limit was unknown. The total column for costs of speeding-related crashes includes costs for crashes that occurred on unknown road types. Costs are based on preliminary estimates.

Table 119
Rural Fatal Crashes by State and Average Emergency Medical Services (EMS)
Response Times

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
AL	11.21	96.1	10.87	96.2	32.00	97.9	48.57	97.7	609
AK	10.19	24.4	17.26	17.1	46.76	58.5	59.38	61.0	41
AZ	5.78	25.5	16.29	23.0	42.86	98.4	61.63	98.2	443
AR	6.22	11.6	11.54	10.4	NA	NA	NA	NA	414
CA	8.36	99.1	10.00	99.2	31.50	99.8	61.20	99.2	1,257
CO	8.88	15.8	13.15	12.5	40.58	56.7	56.29	58.5	335
CT	1.22	25.0	6.16	3.8	31.57	45.0	37.68	45.0	80
DE	5.48	1.8	6.30	0.0	32.78	43.9	44.56	43.9	57
DC	NA	NA	NA	NA	NA	NA	NA	NA	NA
FL	5.85	16.3	8.74	13.3	NA	NA	NA	NA	1,142
GA	3.65	8.1	9.76	6.7	37.76	29.4	49.14	30.6	775
HI	4.73	6.3	10.89	2.1	43.05	58.3	58.89	60.4	48
ID	9.01	8.9	13.12	3.0	0.00	99.5	7.00	99.5	203
IL	5.56	4.9	5.33	99.4	NA	NA	22.00	99.8	511
IN	6.38	97.8	11.13	97.3	28.00	99.7	40.50	99.7	598
IA	7.93	16.3	11.41	10.9	36.03	24.1	49.74	31.5	295
KS	7.45	26.4	11.96	18.2	37.81	45.5	53.62	47.5	314
KY	5.63	13.3	10.11	7.2	34.51	31.3	48.86	32.1	595
LA	7.79	10.7	12.83	5.5	21.14	98.7	37.57	98.7	543
ME	7.65	17.4	10.74	7.6	35.90	34.7	49.08	36.8	144
MD	3.72	57.3	7.93	32.3	40.39	60.5	43.85	40.9	220
MA	7.52	32.3	6.98	13.5	36.64	41.7	45.81	43.8	96
MI	4.44	20.2	9.16	17.0	NA	NA	NA	NA	688
MN	5.10	16.0	11.81	17.7	32.56	40.1	48.16	42.5	407
MS	14.15	21.7	14.43	21.6	16.24	19.4	44.49	19.8	828
MO	7.96	19.4	11.87	2.6	37.05	60.1	53.69	61.0	705
MT	9.92	9.2	15.97	4.9	43.97	37.8	61.78	43.8	185
NE	6.92	22.6	9.25	15.8	30.95	39.8	43.17	44.8	221
NV	9.05	11.7	19.10	8.6	42.85	35.6	64.27	42.9	163
NH	3.85	10.1	9.99	10.1	36.90	65.2	52.42	65.2	89

Table 119
Rural Fatal Crashes by State and Average Emergency Medical Services (EMS)
Response Times (Continued)

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
NJ	3.50	98.7	NA	NA	NA	NA	NA	NA	157
NM	NA	NA	NA	NA	NA	NA	NA	NA	285
NY	3.62	25.0	8.04	24.4	35.36	47.7	45.26	48.2	824
NC	4.19	2.6	11.48	2.3	42.42	38.0	55.72	40.6	916
ND	14.46	11.6	17.26	1.5	37.51	17.4	62.49	26.1	69
OH	6.05	45.8	9.50	43.4	35.59	65.3	49.93	66.2	767
OK	10.64	35.6	11.26	16.4	40.61	38.2	56.87	42.2	464
OR	5.03	15.2	12.07	4.1	45.85	39.7	57.09	42.7	363
PA	6.80	48.2	9.89	34.6	39.68	62.4	50.71	63.8	755
RI	7.71	41.7	9.17	0.0	35.29	41.7	49.86	41.7	12
SC	18.60	99.4	12.60	99.4	14.00	99.9	51.67	99.6	770
SD	8.78	26.9	13.87	17.9	39.32	39.6	56.89	44.8	134
TN	10.04	47.6	11.28	33.2	32.33	85.1	46.89	85.7	693
TX	8.42	33.8	12.82	32.7	40.63	56.6	59.85	58.2	1,731
UT	6.07	21.3	14.03	23.8	30.00	97.9	57.00	97.9	240
VT	9.33	37.0	10.36	19.2	30.73	43.8	45.64	46.6	73
VA	NA	NA	NA	NA	NA	NA	NA	NA	515
WA	8.91	27.7	10.86	15.2	45.63	48.1	59.04	50.0	310
WV	5.31	5.2	10.98	0.7	44.58	31.6	57.62	33.5	272
WI	4.28	9.2	11.04	5.2	32.65	39.4	47.22	40.6	480
WY	8.67	18.6	17.23	9.7	36.48	50.4	58.78	52.2	113
USA	6.77	37.0	11.36	34.8	36.28	67.0	51.78	67.9	21,949
PR	10.83	80.0	12.95	79.5	NA	NA	NA	NA	205

* Includes crashes for which both times were known.
 NA = not available or not applicable.

Table 120
Urban Fatal Crashes by State and Average Emergency Medical Services (EMS)
Response Times

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
AL	4.92	96.2	6.27	96.8	21.33	98.3	31.67	98.3	343
AK	1.95	8.7	5.57	0.0	16.95	17.4	24.53	17.4	23
AZ	2.29	44.3	6.65	41.5	23.64	97.4	32.82	97.4	415
AR	3.20	11.5	5.64	10.8	NA	NA	NA	NA	130
CA	3.26	99.0	4.63	99.1	21.25	99.8	30.56	99.0	1,855
CO	2.83	15.3	5.26	13.0	22.19	44.9	30.09	44.9	216
CT	2.57	15.5	5.31	5.8	25.16	31.4	31.33	31.0	226
DE	2.98	6.1	5.82	0.0	19.09	30.6	26.81	34.7	49
DC	1.24	2.0	6.70	0.0	23.63	2.0	29.15	4.0	50
FL	3.36	26.7	5.27	23.8	23.00	99.6	30.83	99.6	1,406
GA	2.69	11.7	7.25	11.1	28.28	29.1	38.31	29.3	495
HI	2.07	12.3	7.67	1.5	31.74	27.7	40.26	27.7	65
ID	2.70	4.8	6.76	0.0	NA	NA	NA	NA	21
IL	3.34	5.8	6.80	99.3	NA	NA	20.00	99.9	730
IN	4.00	98.6	5.14	97.5	NA	NA	NA	NA	282
IA	3.58	5.5	5.94	3.3	23.99	6.6	32.39	8.8	91
KS	3.85	32.3	6.46	24.4	21.90	37.0	31.66	37.0	127
KY	3.08	23.4	6.65	18.1	25.41	32.2	34.48	32.8	171
LA	4.71	15.8	7.36	6.2	22.30	85.8	33.58	86.2	260
ME	4.59	9.4	6.81	0.0	20.43	28.1	29.39	28.1	32
MD	4.10	65.6	7.42	54.7	32.03	73.1	36.38	62.9	256
MA	6.63	41.3	4.79	22.1	26.02	40.2	34.35	39.5	281
MI	3.18	41.1	5.40	37.3	22.00	99.8	31.00	99.8	545
MN	3.02	17.3	6.48	17.3	22.06	31.6	29.36	33.3	168
MS	13.77	0.0	14.08	0.0	14.92	0.0	42.77	0.0	13
MO	5.42	27.9	7.08	8.0	21.76	43.0	31.04	43.3	312
MT	2.26	0.0	5.52	0.0	16.52	8.7	24.24	8.7	23
NE	2.52	12.0	4.61	8.0	17.74	22.0	24.55	20.0	50
NV	4.01	8.6	6.19	2.6	22.00	32.2	31.05	33.6	152
NH	0.91	8.0	5.43	16.0	19.44	64.0	25.22	64.0	25

Table 120
Urban Fatal Crashes by State and Average Emergency Medical Services (EMS)
Response Times (Continued)

State	Average Response Time (Minutes)*								Total Fatal Crashes
	Time of Crash to EMS Notification		EMS Notification to EMS Arrival at Crash Scene		EMS Arrival at Crash Scene to Hospital Arrival		Time of Crash to Hospital Arrival		
	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	Average	Percent Unknown	
NJ	2.14	98.6	6.75	99.2	21.00	99.8	30.00	99.8	494
NM	1.00	98.9	1.00	98.9	NA	NA	NA	NA	89
NY	2.56	72.4	5.71	73.5	25.06	83.2	32.93	82.7	565
NC	3.44	1.9	7.90	1.4	31.14	36.6	41.47	38.1	517
ND	3.40	0.0	4.30	0.0	18.70	0.0	26.40	0.0	10
OH	3.40	44.6	5.69	40.2	25.55	55.2	33.68	55.6	518
OK	5.46	33.9	5.64	19.1	27.25	30.6	36.61	31.2	183
OR	1.58	7.4	5.27	2.5	28.69	33.6	35.52	33.6	122
PA	4.84	45.9	6.39	28.4	25.86	48.6	34.88	50.3	599
RI	4.80	39.7	4.26	0.0	30.27	29.3	36.66	29.3	58
SC	NA	NA	NA	NA	NA	NA	NA	NA	142
SD	1.80	0.0	5.20	0.0	18.23	13.3	24.00	13.3	15
TN	10.36	83.7	6.21	79.4	23.68	92.5	28.67	92.7	412
TX	4.11	25.8	7.19	25.7	28.56	45.8	38.98	45.9	1,429
UT	4.05	16.2	5.33	19.1	28.00	97.1	42.00	97.1	68
VT	2.56	40.0	7.33	0.0	32.85	13.3	40.77	13.3	15
VA	NA	NA	NA	NA	NA	NA	NA	NA	318
WA	3.58	27.2	5.39	9.4	36.73	42.0	43.46	42.8	276
WV	2.86	3.5	4.93	0.0	28.89	20.7	36.13	20.7	58
WI	2.50	5.9	6.02	1.3	25.06	30.3	32.59	30.9	152
WY	3.93	6.3	5.25	0.0	23.93	6.3	31.93	6.3	16
USA	3.62	46.1	6.26	46.8	26.63	71.5	35.46	71.4	14,868
PR	10.11	77.1	9.99	76.8	NA	NA	NA	NA	319

* Includes crashes for which both times were known.
 NA = not available.

Table 121
Persons Killed, Population, and Fatality Rates by City

City	State	1998 Fatalities			1998 Population	Total Fatality Rate per 100,000 Population
		Total Killed	Pedestrians Killed			
			Number	Percent of Total Killed		
New York	NY	359	173	48.2	7,420,166	4.84
Los Angeles	CA	231	85	36.8	3,597,556	6.42
Chicago	IL	268	85	31.7	2,802,079	9.56
Houston	TX	236	61	25.8	1,786,691	13.21
Philadelphia	PA	104	27	26.0	1,436,287	7.24
San Diego	CA	88	32	36.4	1,220,666	7.21
Phoenix	AZ	175	49	28.0	1,198,064	14.61
San Antonio	TX	127	32	25.2	1,114,130	11.40
Dallas	TX	168	46	27.4	1,075,894	15.61
Detroit	MI	171	49	28.7	970,196	17.63
San Jose	CA	46	17	37.0	861,284	5.34
San Francisco	CA	62	34	54.8	745,774	8.31
Indianapolis	IN	39	6	15.4	741,304	5.26
Jacksonville	FL	99	28	28.3	693,630	14.27
Columbus	OH	55	8	14.5	670,234	8.21
Baltimore	MD	43	28	65.1	645,593	6.66
El Paso	TX	57	17	29.8	615,032	9.27
Memphis	TN	106	20	18.9	603,507	17.56
Milwaukee	WI	31	11	35.5	578,364	5.36
Boston	MA	25	12	48.0	555,447	4.50
Austin	TX	62	13	21.0	552,434	11.22
Seattle	WA	25	6	24.0	536,978	4.66
Washington	DC	54	15	27.8	523,124	10.32
Nashville-Davidson	TN	88	16	18.2	510,274	17.25
Charlotte	NC	57	13	22.8	504,637	11.30
Portland	OR	46	13	28.3	503,891	9.13
Denver	CO	49	17	34.7	499,055	9.82
Cleveland	OH	41	7	17.1	495,817	8.27
Fort Worth	TX	65	13	20.0	491,801	13.22
Oklahoma City	OK	74	11	14.9	472,221	15.67

Source: Population—Bureau of the Census.

Table 121
Persons Killed, Population, and Fatality Rates by City (Continued)

City	State	1998 Fatalities			1998 Population	Total Fatality Rate per 100,000 Population
		Total Killed	Pedestrians Killed			
			Number	Percent of Total Killed		
New Orleans	LA	48	7	14.6	465,538	10.31
Tucson	AZ	47	15	31.9	460,466	10.21
Kansas City	MO	66	14	21.2	441,574	14.95
Virginia Beach	VA	20	5	25.0	432,380	4.63
Long Beach	CA	22	9	40.9	430,905	5.11
Albuquerque	NM	45	12	26.7	419,311	10.73
Las Vegas	NV	39	6	15.4	404,288	9.65
Sacramento	CA	17	5	29.4	404,168	4.21
Atlanta	GA	79	26	32.9	403,819	19.56
Fresno	CA	34	14	41.2	398,133	8.54
Honolulu	HI	23	5	21.7	395,789	5.81
Tulsa	OK	34	8	23.5	381,393	8.91
Omaha	NE	24	5	20.8	371,291	6.46
Miami	FL	62	21	33.9	368,624	16.82
Oakland	CA	33	12	36.4	365,874	9.02
Mesa	AZ	34	5	14.7	360,076	9.44
Minneapolis	MN	24	11	45.8	351,731	6.82
Colorado Springs	CO	19	4	21.1	344,987	5.51
Pittsburgh	PA	26	5	19.2	340,520	7.64
St. Louis	MO	49	11	22.4	339,316	14.44
Cincinnati	OH	19	5	26.3	336,400	5.65
Wichita	KS	39	8	20.5	329,211	11.85
Toledo	OH	30	5	16.7	312,174	9.61
Arlington	TX	24	5	20.8	306,497	7.83
Santa Ana	CA	11	5	45.5	305,955	3.60
Buffalo	NY	17	4	23.5	300,717	5.65
Anaheim	CA	19	2	10.5	295,153	6.44
Tampa	FL	56	16	28.6	289,156	19.37
Corpus Christi	TX	33	12	36.4	281,453	11.72
Newark	NJ	34	14	41.2	267,823	12.69

Source: Population—Bureau of the Census.

Table 121
Persons Killed, Population, and Fatality Rates by City (Continued)

City	State	1998 Fatalities			1998 Population	Total Fatality Rate per 100,000 Population
		Total Killed	Pedestrians Killed			
			Number	Percent of Total Killed		
Riverside	CA	38	6	15.8	262,140	14.50
Raleigh	NC	34	7	20.6	259,423	13.11
St. Paul	MN	15	3	20.0	257,284	5.83
Louisville	KY	30	11	36.7	255,045	11.76
Anchorage	AK	17	6	35.3	254,982	6.67
Birmingham	AL	46	8	17.4	252,997	18.18
Aurora	CO	22	7	31.8	250,604	8.78
Lexington-Fayette	KY	39	7	17.9	241,749	16.13
Stockton	CA	14	4	28.6	240,143	5.83
St. Petersburg	FL	37	7	18.9	236,029	15.68
Jersey City	NJ	15	3	20.0	232,429	6.45
Plano	TX	11	0	--	219,486	5.01
Rochester	NY	15	8	53.3	216,887	6.92
Akron	OH	22	1	4.5	215,712	10.20
Norfolk	VA	20	4	20.0	215,215	9.29
Lincoln	NE	15	3	20.0	213,088	7.04
Baton Rouge	LA	26	6	23.1	211,551	12.29
Hialeah	FL	32	11	34.4	211,392	15.14
Bakersfield	CA	19	8	42.1	210,284	9.04
Madison	WI	9	3	33.3	209,306	4.30
Fremont	CA	9	2	22.2	204,298	4.41
Mobile	AL	17	4	23.5	202,181	8.41
Chesapeake	VA	26	3	11.5	199,564	13.03
Greensboro	NC	35	4	11.4	197,910	17.68
Montgomery	AL	32	8	25.0	197,014	16.24
Fremont	CA	9	2	22.2	204,298	4.41
Mobile	AL	17	4	23.5	202,181	8.41
Chesapeake	VA	26	3	11.5	199,564	13.03
Greensboro	NC	35	4	11.4	197,910	17.68
Montgomery	AL	32	8	25.0	197,014	16.24
Scottsdale	AZ	23	5	21.7	195,394	11.77
Huntington Beach	CA	10	3	30.0	195,316	5.12
Richmond	VA	20	3	15.0	194,173	10.30
Glendale	AZ	17	5	29.4	193,482	8.79
Garland	TX	18	3	16.7	193,408	9.31

Source: Population—Bureau of the Census.

Table 121
Persons Killed, Population, and Fatality Rates by City (Continued)

City	State	1998 Fatalities			1998 Population	Total Fatality Rate per 100,000 Population
		Total Killed	Pedestrians Killed			
			Number	Percent of Total Killed		
Augusta-Richmond Co	GA	32	3	9.4	187,689	17.05
San Bernardino	CA	19	4	21.1	186,402	10.19
Fort Wayne	IN	12	3	25.0	185,716	6.46
Grand Rapids	MI	6	3	50.0	185,437	3.24
Glendale	CA	8	3	37.5	185,086	4.32
Spokane	WA	13	1	7.7	184,058	7.06
Columbus	GA	21	9	42.9	182,219	11.52
Modesto	CA	7	2	28.6	182,016	3.85
Orlando	FL	33	9	27.3	181,175	18.21
Tacoma	WA	30	3	10.0	179,814	16.68
Newport News	VA	16	4	25.0	178,615	8.96
Irving	TX	15	6	40.0	178,253	8.42
Arlington CDP	VA	0	0	--	177,275	0.00
Huntsville	AL	17	0	--	175,979	9.66
Laredo	TX	16	5	31.3	175,783	9.10
Little Rock	AR	21	3	14.3	175,303	11.98
Salt Lake City	UT	24	7	29.2	174,348	13.77
Amarillo	TX	24	4	16.7	171,207	14.02
Tempe	AZ	21	4	19.0	167,622	12.53
Dayton	OH	19	9	47.4	167,475	11.34
Worcester	MA	11	6	54.5	166,535	6.61
Knoxville	TN	26	1	3.8	165,540	15.71
Winston-Salem	NC	21	3	14.3	164,316	0.00
Reno	NV	14	6	42.9	163,334	8.57
Chula Vista	CA	10	5	50.0	160,553	6.23
Chandler	AZ	9	2	22.2	160,329	5.61
Boise	ID	1	0	--	157,452	0.64
Oxnard	CA	8	3	37.5	154,622	5.17
Fort Lauderdale	FL	31	11	35.5	153,728	20.17
Durham	NC	15	3	20.0	153,513	9.77
Henderson	NV	11	3	27.3	152,717	7.20
Oceanside	CA	8	2	25.0	152,367	5.25
Syracuse	NY	11	1	9.1	152,215	7.23
Garden Grove	CA	8	3	37.5	151,264	5.29
Providence	RI	9	3	33.3	150,890	5.96

Source: Population—Bureau of the Census.

Table 122
Fatalities and Fatality Rates by State, 1975-1998

State	Fatalities						Fatality Rate per 100 Million Vehicle Miles Traveled					
	1975	1980	1985	1990	1998	Difference, 1975-1998	1975	1980	1985	1990	1997*	Difference, 1975-1997*
AL	902	940	882	1,121	1,071	+19%	3.6	3.2	2.5	2.6	2.2	-39%
AK	112	88	127	98	71	-37%	4.4	3.3	3.2	2.5	1.8	-59%
AZ	670	947	893	869	980	+46%	4.2	5.3	4.1	2.5	2.2	-48%
AR	559	588	534	604	625	+12%	4.0	3.6	3.1	2.9	2.3	-43%
CA	4,092	5,496	4,960	5,192	3,494	-15%	3.1	3.5	2.4	2.0	1.3	-58%
CO	581	709	579	544	628	+8%	3.5	3.2	2.2	2.0	1.6	-54%
CT	389	575	448	385	329	-15%	2.1	3.0	2.0	1.5	1.2	-43%
DE	122	153	104	138	115	-6%	3.4	3.6	1.9	2.1	1.8	-47%
DC	70	41	60	48	54	-23%	2.3	1.2	1.9	1.4	1.8	-22%
FL	1,998	2,825	2,832	2,891	2,824	+41%	3.2	3.6	3.2	2.6	2.1	-34%
GA	1,360	1,508	1,361	1,562	1,569	+15%	3.5	3.5	2.5	2.2	1.7	-51%
HI	144	186	126	177	120	-17%	3.5	3.3	1.9	2.2	1.6	-54%
ID	281	331	255	244	265	-6%	4.8	4.8	3.3	2.5	2.0	-58%
IL	2,041	1,975	1,534	1,589	1,393	-32%	3.6	3.0	2.2	1.9	1.4	-61%
IN	1,128	1,166	974	1,049	978	-13%	3.0	3.0	2.4	2.0	1.4	-53%
IA	670	626	474	465	449	-33%	3.8	3.3	2.3	2.0	1.7	-55%
KS	509	595	486	444	493	-3%	3.3	3.4	2.5	1.9	1.8	-45%
KY	863	820	712	849	858	-1%	3.5	3.2	2.5	2.5	1.9	-46%
LA	934	1,219	931	959	922	-1%	4.6	5.0	2.8	2.5	2.4	-48%
ME	223	265	206	213	192	-14%	3.1	3.5	2.2	1.8	1.4	-55%
MD	670	756	729	707	606	-10%	2.7	2.6	2.2	1.7	1.3	-52%
MA	864	881	742	605	406	-53%	2.7	2.5	1.9	1.3	0.9	-67%
MI	1,779	1,750	1,545	1,571	1,367	-23%	3.1	2.8	2.3	1.9	1.6	-48%
MN	754	848	608	566	650	-14%	2.9	3.0	1.9	1.5	1.2	-59%
MS	546	695	662	750	948	+74%	3.8	4.2	3.5	3.1	2.7	-29%
MO	1,045	1,175	931	1,097	1,169	+12%	3.4	3.4	2.4	2.2	1.9	-44%
MT	291	325	223	212	237	-19%	5.1	4.9	3.0	2.5	2.8	-45%
NE	369	396	237	262	315	-15%	3.3	3.5	2.0	1.9	1.8	-45%
NV	218	346	259	343	361	+66%	4.7	5.7	3.4	3.4	2.1	-55%
NH	151	194	191	158	128	-15%	2.9	3.0	2.5	1.6	1.1	-62%

Table 122
Fatalities and Fatality Rates by State, 1975-1998 (Continued)

State	Fatalities						Fatality Rate per 100 Million Vehicle Miles Traveled					
	1975	1980	1985	1990	1998	Difference, 1975-1998	1975	1980	1985	1990	1997*	Difference, 1975-1997*
NJ	1,043	1,120	964	886	743	-29%	2.2	2.2	1.8	1.5	1.2	-45%
NM	555	606	535	499	424	-24%	5.6	5.4	4.0	3.1	2.2	-61%
NY	2,366	2,610	2,006	2,217	1,498	-37%	3.6	3.4	2.2	2.1	1.4	-61%
NC	1,506	1,503	1,482	1,385	1,596	+6%	4.1	3.6	3.0	2.2	1.8	-56%
ND	167	151	90	112	92	-45%	3.7	2.9	1.6	1.9	1.5	-59%
OH	1,766	2,033	1,646	1,638	1,422	-19%	2.8	2.8	2.2	1.8	1.4	-50%
OK	757	959	744	641	755	-0%	3.3	3.5	2.4	1.9	2.0	-39%
OR	562	646	559	579	538	-4%	3.5	3.4	2.6	2.2	1.6	-54%
PA	2,078	2,089	1,771	1,646	1,481	-29%	3.3	2.9	2.3	1.9	1.6	-52%
RI	110	129	109	84	74	-33%	1.9	2.4	1.9	1.1	1.1	-42%
SC	820	852	951	979	1,002	+22%	4.0	3.8	3.6	2.8	2.2	-45%
SD	195	228	130	153	165	-15%	3.8	3.7	2.1	2.2	1.9	-50%
TN	1,126	1,153	1,101	1,177	1,216	+8%	3.4	3.4	3.0	2.5	2.0	-41%
TX	3,372	4,366	3,678	3,250	3,577	+6%	4.0	3.8	2.6	2.1	1.8	-55%
UT	272	334	303	272	350	+29%	3.4	3.1	2.5	1.9	1.8	-47%
VT	143	137	115	90	104	-27%	4.3	3.7	2.5	1.5	1.5	-65%
VA	993	1,045	976	1,079	935	-6%	2.9	2.7	2.0	1.8	1.4	-52%
WA	758	971	744	825	660	-13%	3.2	3.4	2.2	1.8	1.3	-59%
WV	461	523	420	481	354	-23%	4.4	4.9	3.3	3.1	2.1	-52%
WI	930	972	744	769	714	-23%	3.3	3.1	2.0	1.7	1.3	-61%
WY	210	245	152	125	154	-27%	5.4	4.9	2.8	2.1	1.8	-67%
USA	44,525	51,091	43,825	44,599	41,471	-7%	3.4	3.3	2.5	2.1	1.6	-53%
PR	496	520	600	473	558	+13%	7.3	6.0	5.7	3.7	3.7	-49%

* Vehicle miles traveled data not available for 1998.

Sources: Fatalities—Fatality Analysis Reporting System (FARS). Vehicle Miles Traveled—Federal Highway Administration.

**Table 123
Child Passenger Protection Laws**

State	Effective Date	Restraint Requirement Age ^(1,2)	Safety Seat Required	Must Use Safety Seat or Seat Belt	Penalty
AL	7/83	Under 6	Under 6	Age 4 or 5	\$10
AK	6/85	Under 16	Under 4	No	\$50, 2 points
AZ	8/83	Under 5	Under 5	No	\$50
AR	8/83	Under 5	Under 5	No	\$25-\$100
CA	1/83	Under 16	Under 4 ⁽³⁾	No	\$100, 1 Point
CO	1/84	Under 16	Under 4 ⁽⁴⁾	No	\$50 + \$6 surcharge
CT	5/82	Under 16	Under 4 ⁽⁴⁾	Over 40 pounds	\$100-\$2,000 ⁽⁵⁾
DE	6/82	Under 16 ⁽⁶⁾	Under 4	No	\$25-\$50
DC	7/83	Under 16	Under 4	Age 3 through 16	\$55, 2 points
FL	7/83	Under 16	Under 6	Age 4 or 5	\$60 + \$10 court cost
GA	7/84	Under 16	Under 5	Age 3 or 4	\$50-\$100
HI	7/83	Under 4	Under 3	Age 3	\$100-\$500
ID	1/85	Under 4	Under 4 ⁽⁴⁾	No	\$100
IL	7/83	Under 16	Under 4	Age 4 or 5	\$25-\$50
IN	1/84	Under 12	Under 4	Age 4 through 11	\$25
IA	1/85	Under 6	Under 3	Age 3 through 5	\$10
KS	1/82	Under 14	Under 4	No	\$20
KY	7/82	Under 16	40" and under	No	\$50
LA	9/84	Under 13	Under 3	Age 3 through 12	\$50-\$100
ME	9/83	Under 16	Under 4	Age 4 through 16	\$25-\$500
MD	1/84	Under 16	Under 4 ⁽³⁾	Over 40 pounds	\$25
MA	1/82	Under 16	Under 6	No	\$25
MI	4/82	Under 16	Under 4	Age 1 through 4 in rear	\$10
MN	8/83	Under 11	Under 4	No	\$50
MS	7/83	Under 8	Under 4	No	\$25
MO	1/84	Under 16	Under 4	No	\$25 + court costs
MT	1/84	Under 16	Under 2	Age 3 or 4	\$100
NE	8/83	Under 5	Under 4 ⁽³⁾	Over 40 pounds	\$25
NV	7/83	Under 16	Under 5 ⁽³⁾	No	\$35-\$100
NH	7/83	Under 16	Under 4	No	\$25-\$50

⁽¹⁾Table covers laws applicable to children under 16 years old.

⁽²⁾All States have laws requiring front seat occupants under 16 years of age to be restrained by seat belts or child safety seats.

⁽³⁾Or less than 40 pounds.

⁽⁴⁾And less than 40 pounds.

⁽⁵⁾Third offense can result in 1 year imprisonment.

⁽⁶⁾Children under 12 years old and less than 66 inches tall may not occupy front seat if equipped with passenger-side airbag.

Table 123
Child Passenger Protection Laws (Continued)

State	Effective Date	Restraint Requirement Age ^(1,2)	Safety Seat Required	Must Use Safety Seat or Seat Belt	Penalty
NJ	4/83	Under 16	Under 5	No	\$10-\$25
NM	6/83	Under 11	Under 5	Age 1 through 5 in rear	\$25
NY	4/82	Under 10	Under 4	No	\$25-\$100
NC	7/82	Under 12	Under 12	Age 4 through 12	\$25
ND	1/84	Under 11	Under 3	Age 3 through 10	\$20
OH	3/83	Under 4 ⁽³⁾	Under 4 ⁽³⁾	No	\$100-\$250 ⁽⁷⁾
OK	11/83	Under 5	Under 4 ⁽⁸⁾	Age 4 rear	\$10-\$15
OR	1/84	Under 16	Under 4 ⁽⁴⁾	Age 4 or Over	\$75
PA	1/84	Under 16	Under 4	No	\$25
RI	7/80	Under 16	Under 6 ⁽⁹⁾	Age 4 or 5	\$150
SC	7/83	Under 16	Under 4	Age 1 through 5	\$25
SD	7/84	Under 16	Under 5	Over 40 pounds	\$20
TN	1/78	Under 12	Under 4	No	\$50 maximum ⁽¹⁰⁾
TX	10/84	Under 4	Under 2	Age 3 or 4	\$25-\$50
UT	7/84	Under 10	Under 2	Age 2 through 10	\$75
VT	7/84	Under 16	Under 5	No	\$25
VA	1/83	Under 16	Under 4	Age 3 ⁽¹¹⁾	\$50, 3 points
WA	1/84	Under 16	Under 3	Age 3 through 10	\$250 maximum
WV	7/81	Under 16	Under 3	Age 3 through 8	\$10-\$20
WI	11/82	Under 8	Under 4	Age 4 through 8	\$30-\$75
WY	4/85	Under 5 ⁽⁴⁾	Under 5 ⁽⁴⁾	No	\$50-\$100
PR	1/89	Under 16	Under 4	No	\$10

(1) Table covers laws applicable to children under 16 years old.

(2) All States have laws requiring front seat occupants under 16 years of age to be restrained by seat belts or child safety seats.

(3) Or less than 40 pounds.

(4) And less than 40 pounds.

(5) Third offense can result in 1 year imprisonment.

(6) Children under 12 years old and less than 66 inches tall may not occupy front seat if equipped with passenger-side airbag.

(7) Subsequent offenses can result in 30 days imprisonment.

(8) And less than or equal to 60 pounds.

(9) Children under age 6 must be transported in the back seat.

(10) Can result in 30 days imprisonment.

(11) Seat belts can be substituted only if the size and weight of the child make the use of a seat belt practical and the use of a child restraint device impractical.

Table 124
Status of State Motorcycle Helmet Use Requirements

State	Original Law	Subsequent Action, Date(s) and Current Status
AL	11/06/67	Helmet use required for all riders.
AK	01/01/71	Repealed effective 7-1-76 except for persons under 18 years of age, and all passengers.
AZ	01/01/69	Repealed effective 5-27-76 except for persons under 18 years of age.
AR	07/10/67	Helmet use required for all riders. Repealed effective 8/1/97 except for certain riders.
CA	01/01/85	Helmet use required by riders under 15 1/2 years of age. Effective 1-1-92 helmet use required for all riders.
CO	07/01/69	Repealed effective 5-20-77.
CT	10/01/67	Not enforced until 2-1-74. Repealed effective 6-1-76. Effective 1-1-90 adopted requirement for helmet use by persons under 18.
DE	10/01/68	Repealed effective 6-10-78 except for persons under 19 years of age. Also requires that a helmet be carried on the motorcycle for persons 19 and older.
DC	10/12/70	Helmet use required for all riders.
FL	09/05/67	Helmet use required for all riders.
GA	08/31/66	Helmet use required for all riders.
HI	05/01/68	Repealed effective 6-7-77 except for persons under 18 years of age.
ID	01/01/68	Repealed effective 3-29-78 except for persons under 18 years of age.
IL	01/01/68	Repealed effective 6-17-69 after being declared unconstitutional by the State Supreme Court on 5-28-69.
IN	07/01/67	Repealed effective 9-1-77. Effective 6-1-85 adopted requirement for helmet use by persons under 18.
IA	09/01/75	Repealed effective 7-1-76.
KS	07/01/67	7-1-67 to 3-17-70 for all cyclists. 3-17-70 to 7-1-72 only for cyclists under 21 years of age. 7-1-72 to 7-1-76 for all cyclists. 7-1-76 to 7-1-82 applied only to persons under 16 years of age. After 7-1-82 applies only to persons under 18 years of age.
KY	07/01/68	Helmet use required for riders under 21 years of age, riders operating with instruction permits, riders with less than 1 year of riding experience, and/or riders who do not provide proof of health insurance to county.
LA	07/31/68	Repealed effective 10-1-76 except for persons under 18 years of age. Readopted for all cyclists effective 1-1-82. Helmet use required for all riders.
ME	10/07/67	Repealed effective 10-24-77. Amended effective 7-3-80 to require use by cyclists under 15 years of age.
MD	09/01/68	Repealed effective 5-29-79 except for persons under 18 years of age. Effective 10-1-92 helmet use required for all riders.
MA	02/27/67	Helmet use required for all riders.
MI	03/10/67	Repealed effective 6-12-68. New law adopted effective 9-1-69. Helmet use required for all riders.
MN	05/01/68	Repealed effective 4-6-77 except for persons under 18 years of age.
MS	03/28/74	Helmet use required for all riders.
MO	10/13/67	Helmet use required for all riders.
MT	07/01/73	Repealed effective 7-1-77 except for persons under 18 years of age.
NE	05/29/67	Never enforced. Declared unconstitutional by State Supreme Court and repealed effective 9-1-77. Effective 1-1-89 helmet use required for all riders.
NV	01/01/72	Helmet use required for all riders.
NH	09/03/67	Repealed effective 8-7-77 except for persons under 18 years of age.

Table 124
Status of State Motorcycle Helmet Use Requirements (Continued)

State	Original Law	Subsequent Action, Date(s) and Current Status
NJ	01/01/68	Helmet use required for all riders.
NM	05/01/67	Initial law applied only to cyclists under 18 years of age and to all passengers. Law requiring helmet use by all cyclists adopted effective 7-1-73. Repealed effective 6-17-77 except for persons under 18 years of age.
NY	01/01/67	Helmet use required for all riders.
NC	01/01/68	Helmet use required for all riders.
ND	07/01/67	Repealed effective 7-1-77 except for persons under 18 years of age.
OH	04/02/68	Repealed effective 7-1-78 except for persons under 18 years and first year novices.
OK	04/27/67	4-27-67 to 4-7-69 helmet use required for all motorcyclists. From 4-7-69 to 5-3-76 for cyclists under 21 years of age. 5-3-76 for cyclists under 18 years of age.
OR	01/01/68	Repealed effective 10-4-77, except for persons under 18 years of age. Effective 6-16-89 helmet use required for all riders.
PA	09/13/68	Helmet use required for all riders.
RI	06/30/67	Repealed effective 5-21-76 except for passengers on motorcycles. Effective 7-01-92 helmet use required for operators under 21 years of age, all passengers, and first year novices.
SC	07/01/67	Repealed for ages 21 and over effective 6-16-80.
SD	07/01/67	Repealed effective 7-1-77 except for persons under 18 years of age.
TN	06/05/67	Helmet use required for all riders.
TX	01/01/68	Repealed effective 9-1-77 except for persons under 18 years of age. Effective 9-1-89 helmet use required for all riders. Effective 9-1-97 helmets required for riders under 21, those who have not completed a rider training course, and those without \$10,000 medical insurance.
UT	05/13/69	Helmets required only on roads with speed limits of 35 mph or higher. Effective 5-8-77 law changed to require helmet use only by persons under 18 years of age.
VT	07/01/68	Helmet use required for all riders.
VA	01/01/71	Helmet use required for all riders.
WA	07/01/67	Repealed effective 7-1-77. 7-1-87 helmet use required for riders under 18. Effective 6-8-90 helmet use required for all riders.
WV	05/21/68	Helmet use required for all riders.
WI	07/01/68	Repealed effective 3-19-78 except for persons under 18 years of age, and for all holders of learner's permits.
WY	05/25/73	Repealed effective 5-27-83 except for persons under 18 years of age.
PR	07/20/60	Helmet use required for all riders.

- 22 states plus the District of Columbia and Puerto Rico require helmet use for all riders.
- 25 states require helmet use for certain riders.
- 3 states do not require helmet use for riders.

Table 125
Impaired Driving High-Priority Legislation

State	Administrative Per Se (BAC Level)	Illegal Per Se (BAC Level)	Lower BAC for Youthful DWI Offenders (BAC Level and Age)	License Sanction (Mandatory Minimum for a DWI Conviction)		
				First Offense	Second Offense	Third Offense
AL	Y-0.08	0.08	Y-0.02 (<21)	S-90 days	R-1 yr	R-3 yrs
AK	Y-0.10	0.10	Y-0.00 (<21)	R-30 days	R-1 yr	R-10 yrs
AZ	Y-0.10	0.10	Y-0.00 (<21)	S-90 days	R-1 yr	R-3 yrs
AR	Y-0.10	0.10	Y-0.02 (<21)	--	--	--
CA	Y-0.08	0.08	Y-0.01 (<21)	--	--	R-18 mos
CO	Y-0.10	0.10	Y-0.02 (<21)	--	R-1 yr	R-2 yrs
CT	Y-0.10	0.10	Y-0.02 (<21)	--	--	--
DE	Y-0.10	0.10	Y-0.02 (<21)	--	R-6 mos	R-6 mos
DC	Y-0.05	0.10	Y-0.00 (<21)	R-6 mos	R-1 yr	R-2 yrs
FL	Y-0.08	0.08	Y-0.02 (<21)	--	R-12 mos	R-24 mos
GA	Y-0.10	0.10	Y-0.02 (<21)	--	S-120 days	R-5 yrs
HI	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	S-1 yr	R-1 yr
ID	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	S-1 yr	S-1 yr
IL	Y-0.08	0.08	Y-0.02 (<21)	--	--	--
IN	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	S-1 yr	S-1 yr
IA	Y-0.10	0.10	Y-0.02 (<21)	R-30 days	R-1 yr	R-1 yr
KS	Y-0.08	0.08	Y-0.02 (<21)	S-30 days	S-1 yr	S-1 yr
KY	A	0.10	Y-0.02 (<21)	S-30 days	R-12 mos	R-24 mos
LA	Y-0.10	0.10	Y-0.02 (<21)	--	--	--
ME	Y-0.08	0.08	Y-0.00 (<21)	S-60 days	S-18 mos	S-4 yrs
MD	Y-0.10	0.10	Y-0.02 (<21)	--	--	--
MA	Y-0.08	No	Y-0.02 (<21)	S-45 days	R-6 mos	R-2 yrs
MI	N	0.10	Y-0.02 (<21)	--	R-1 yr	S-5 yrs
MN	Y-0.10	0.10	Y-0.00 (<21)	R-15 days	R-15 days	R-15 days
MS	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	S-1 yr	S-3 yrs
MO	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	R-2 yrs	R-3 yrs
MT	N	0.10	Y-0.02 (<21)	--	R-3 mos	R-3 mos
NE	Y-0.10	0.10	Y-0.02 (<21)	R-60 days	R-6 mos	R-1 yr
NV	Y-0.10	0.10	Y-0.02 (<21)	R-45 days	R-1 yr	R-1.5 yrs
NH	Y-0.08	0.08	Y-0.02 (<21)	R-90 days	R-3 yrs	R-3 yrs

Table 125
Impaired Driving High-Priority Legislation (Continued)

State	Administrative Per Se (BAC Level)	Illegal Per Se (BAC Level)	Lower BAC for Youthful DWI Offenders (BAC Level and Age)	License Sanction (Mandatory Minimum for a DWI Conviction)		
				First Offense	Second Offense	Third Offense
NJ	N	0.10	Y-0.01 (<21)	R-6 mos	R-2 yrs	R-10 yrs
NM	Y-0.08	0.08	Y-0.02 (<21)	--	R-1 yr	R-5 yrs
NY	A	0.10	Y-0.02 (<21)	--	R-1 yr	R-1 yr
NC	Y-0.08	0.08	Y-0.00 (<21)	--	R-2 yrs	R-3 yrs
ND	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	S-365 days	S-2 yrs
OH	Y-0.10	0.10	Y-0.02 (<21)	S-15 days	S-30 days	S-180 days
OK	Y-0.10	0.10	Y-0.00 (<21)	--	--	--
OR	Y-0.08	0.08	Y-0.00 (<21)	--	S-90 days	S-1 yr
PA	N	0.10	Y-0.02 (<21)	S-1 mo	S-12 mos	S-12 mos
RI	N	0.10	Y-0.02 (<21)	S-3 mos	S-1 yr	S-2 yrs
SC	Y-0.15	No	Y-0.02 (<21)	--	S-1 yr	S-4 yrs
SD	N	0.10	Y-0.02 (<21)	--	R-1 yr	R-1 yr
TN	N	0.10	Y-0.02 (<21)	--	R-2 yrs	R-3 yrs
TX	Y-0.10	0.10	Y-0.00 (<21)	--	--	--
UT	Y-0.08	0.08	Y-0.00 (<21)	S-180 days	R-2 yrs	R-2 yrs
VT	Y-0.08	0.08	Y-0.02 (<21)	S-90 days	S-18 mos	R-2 yrs
VA	Y-0.08	0.08	Y-0.02 (<21)	--	R-4 mos	R-3 yrs
WA	Y-0.10	0.10	Y-0.02 (<21)	S-30 days	R-1 yr	R-2 yrs
WV	Y-0.10	0.10	Y-0.02 (<21)	R-30 days	R-1 yr	R-1 yr
WI	Y-0.10	0.10	Y-0.02 (<21)	--	R-60 days	R-90 days
WY	Y-0.10	0.10	Y-0.02 (<21)	--	S-1 yr	R-3 yrs
USA	Y - 42	0.08 - 15 0.10 - 34 No - 2	Y - 51	S - 18 R - 9	S - 15 R - 28	S - 12 R - 32
	Y = Yes N = No A = Alternative		Y = Yes		S = Suspension R = Revocation	
PR	N	No	--	--	--	--

Notes: An "administrative per se law" refers to a statute that allows a state's driver licensing agency to either suspend or revoke a driver's license based either on a specific alcohol (or drug) concentration or on some other criterion related to alcohol or drug use and driving. Such action is completely independent of any licensing action related to a DWI criminal offense. The term "illegal per se" refers to state laws that make it a criminal offense to operate a motor vehicle at or above a specified alcohol (or drug) concentration in the blood, breath, or urine. In those columns showing mandatory sanctions, a "blank" space does not mean that a state does not have a sanction. It only means that the state does not have a mandatory sanction for that offense or violation.

Source: "Digest of State Alcohol-Highway Safety Related Legislation," U.S. Department of Transportation/National Highway Traffic Administration, DOT HS 808 652.

Table 126
Key Provisions of Safety Belt Use Laws

State	Effective ⁽¹⁾	Enforcement	Fine	Seats	Vehicles Exempted ⁽²⁾
AL	07/18/92	Secondary	\$25	Front	Designed for more than 10 passengers.
AK	09/12/90	Secondary	\$15	All	School bus.
AZ	01/01/91	Secondary	\$10	Front	Designed for more than 10 passengers; model year before 1972.
AR	07/15/91	Secondary	\$25 ⁽³⁾	Front	School bus, church bus, public bus.
CA	01/01/86	Primary	\$20 ⁽⁴⁾	All	None.
CO	07/01/87	Secondary	\$15	Front	Passenger bus, school bus.
CT	01/01/86	Primary	\$15	Front	Truck or bus over 15,000 lbs.
DE	01/01/92	Secondary	\$20	Front	None.
DC	12/12/85	Primary	\$50 ⁽⁵⁾	All	Seating more than 8 people.
FL	07/01/86	Secondary	\$30	Front	School bus, public bus, truck over 5,000 lbs.
GA	09/01/88	Primary	\$15	Front	Designed for more than 10 passengers, pickup.
HI	02/16/85	Primary	\$20	Front	Bus or school bus over 10,000 lbs.
ID	07/01/86	Secondary	\$ 5	Front	Over 8,000 lbs.
IL	07/01/85	Secondary	\$25	Front	None.
IN	07/01/87	Primary	\$25	Front	Truck, tractor, RV.
IA	07/01/86	Primary	\$10	Front	None.
KS	07/01/86	Secondary	\$10	Front	Designed for more than 10 people, truck over 12,000 lbs.
KY	07/13/94	Secondary	\$25	All	Designed for more than 10 people.
LA	07/01/86	Primary	\$25 ⁽⁴⁾	Front	Manufactured before 1/1/81.
ME	12/27/95	Secondary	\$25	All	None.
MD	07/01/86	Primary	\$25	Front	Historic vehicle.
MA	02/01/94	Secondary	\$25	All	Truck over 18,000 lbs., bus, taxi.
MI	07/01/85	Secondary	\$25	Front	Bus.
MN	08/01/86	Secondary	\$25	Front	Farm pickup truck.
MS	03/20/90	Secondary	\$25	Front	Farm vehicle, bus.
MO	09/28/85	Secondary	\$10	Front	Designed for more than 10 people, truck over 12,000 lbs.
MT	10/01/87	Secondary	\$20	All	None.
NE	01/01/93	Secondary	\$25	Front	Manufactured before 1973, bus.
NV	07/01/87	Secondary	\$25	All	Taxi, bus, school bus.
NJ	03/01/85	Secondary	\$20	Front	None.
NM	01/01/86	Primary	\$25	Front	Vehicle over 10,000 lbs.
NY	12/01/84	Primary	\$50	Front	Bus, school bus, taxi.
NC	10/01/85	Primary	\$25	Front	Designed for more than 10 people.
ND	07/14/94	Secondary	\$20	Front	Designed for more than 10 people.
OH	05/06/86	Secondary	\$25	Front	None.
OK	02/01/87	Primary	\$20	Front	Farm vehicle, truck, truck tractor, RV.
OR	12/07/90	Primary	\$75	All	None.
PA	11/23/87	Secondary	\$10	Front	Truck over 7,000 lbs.
RI	06/18/91	Secondary	\$30	All	None.
SC	07/01/89	Secondary	\$10	All	School bus, public bus.
SD	01/01/95	Secondary	\$20	Front	Bus, school bus.
TN	04/21/86	Secondary	\$50 ⁽⁶⁾	Front	Vehicle over 8,500 lbs.
TX	09/01/85	Primary	\$25	Front	Designed for more than 10 people, truck over 15,000 lbs.
UT	04/28/86	Secondary	\$10	Front	Vehicle over 10,000 lbs., school/public bus, taxi.
VT	01/01/94	Secondary	\$10	All	Bus, taxi.
VA	01/01/88	Secondary	\$25	Front	Designed for more than 10 people, taxi.
WA	06/11/86	Secondary	\$35	All	Designed for more than 10 people.
WV	09/01/93	Secondary	\$25	Front	Designed for more than 10 people.
WI	12/01/87	Secondary	\$10	All	Taxi, farm truck.
WY	06/08/89	Secondary	None	Front	Designed for more than 10 people, bus.
PR	01/19/75	Primary	\$10	Front	None.

⁽¹⁾Effective date of first belt law in the state.

⁽²⁾Most states exempt vehicles not manufactured with seat belts.

⁽³⁾Plus 3 points on license.

⁽⁴⁾Fine for first offense.

⁽⁵⁾Plus 2 points on license.

⁽⁶⁾Penalty could include 30 days in jail.

Total states with safety belt use laws: 49 plus DC and Puerto Rico.

APPENDIX A ♦ FARS DATA ELEMENTS

1998 Fatality Analysis Reporting System Data Elements

Crash Level

Crash Date	Number of Vehicle Forms Submitted
Atmospheric Condition	Rail Grade Crossing Identifier
City	Related Factors—Crash Level
Construction/Maintenance Zone	Relation to Junction
County	Relation to Roadway
Day of Week	Roadway Alignment
Emergency Medical Services (EMS) Notification Time	Roadway Function Class
EMS Arrival Time at Hospital	Roadway Profile
EMS Arrival Time at Scene	Roadway Surface Condition
First Harmful Event	Roadway Surface Type
Hit and Run	Route Signing
Light Condition	School Bus Related
Manner of Collision	Special Jurisdiction
Milepoint	Speed Limit
National Highway System	State
Number of Drinking Drivers in Crash	Time
Number of Fatalities in Crash	Traffic Control Device
Number of Nonmotorist Forms Submitted	Traffic Control Device Functioning
Number of Person Forms Submitted	Trafficway Flow
Number of Travel Lanes	Trafficway Identifier

Vehicle Level

Body Type	Most Harmful Event
Cargo Body Type	Motor Carrier Identification Number
Crash Avoidance Maneuver	Motorcycle Displacement
Emergency Use	Number of Axles
Extent of Deformation	Number of Deaths in Vehicle
Fire Occurrence	Number of Occupants in Vehicle
Truck Gross Vehicle Weight Rating	Number of Vehicle Forms Submitted
Hazardous Cargo	Passenger Car Weight
Impact Point—Initial	Passenger Car Wheelbase
Impact Point—Principal	Registered Vehicle Owner
Jackknife	Registration State
Manner of Leaving Scene	Related Factors—Vehicle Level

Vehicle Level (Continued)

Rollover	Vehicle Make
Special Use	Vehicle Maneuver
State Information	Vehicle Model
Travel Speed	Vehicle Model Year
Truck Fuel Type	Vehicle Number
Underride/Override	Vehicle Role
Vehicle Configuration	Vehicle Trailering
Vehicle Identification Number	

Driver Level

Commercial Motor Vehicle License Status	Driver License Type Compliance
Compliance with License Endorsements	Driver Presence
Compliance with License Restrictions	Driver Weight
Date of First and Last Crash, Suspension, Conviction	Driver Zip Code
Driver Drinking	License State
Driver Height	Non-CDL License Status
Driver Level Counters	Related Factors—Driver Level
Driver License Status	Violations Charged

Person Level

Age	Method of Other Drug Determination by Police
Air Bag Availability/Deployment	Nonmotorist Location
Alcohol Test Results	Nonmotorist Striking Vehicle Number
Alcohol Test Type	Person Number
Death Certificate Number	Person Type
Death Date	Police-Reported Alcohol Involvement
Death Time	Police-Reported Other Drug Involvement
Drug Test Results	Related Factors—Person Level
Drug Test Type	Restraint System Use
Ejection	Seating Position
Ejection Path	Sex
Extrication	Taken to Hospital or Treatment Facility
Fatal Injury at Work	Time of Crash to Time of Death
Injury Severity	Vehicle Number
Method of Alcohol Determination	

APPENDIX B ♦ GES DATA ELEMENTS

1998 General Estimates System Data Elements

Crash Level

Alcohol Involved in Crash	Number of Travel Lanes
Atmospheric Condition	Number of Vehicles
Day of Week	Pedestrian/Pedalcyclist Crash Type
First Harmful Event	Region of Country
Hour of Crash	Relation to Junction
Interstate Highway	Relation to Roadway
Land Use	Roadway Alignment
Light Condition	Roadway Profile
Manner of Collision	Roadway Surface Condition
Maximum Injury Severity	School Bus Related
Minute of Crash	Speed Limit
Month of Crash	Traffic Control Device
National Highway System Roadway Type	Trafficway Flow
Number Injured in Crash	Work Zone
Number of Nonmotorists	Year of Crash

Vehicle/Driver Level

Crash Type	Hazardous Materials Release
Body Type	Hit and Run
Cargo Body Type	Initial Point of Impact
Carrier's Identification Number	Jackknife
Corrective Action Attempted	Manner of Leaving Scene
Critical Event	Maximum Injury Severity in Vehicle
Damage Areas	Model Year
Damage Severity	Most Harmful Event
Driver Distracted By	Movement Prior to Critical Event
Driver Drinking in Vehicle	Number Injured in Vehicle
Driver Maneuvered To Avoid	Number of Axles, Including Trailer
Driver Presence	Number of Occupants
Driver's Vision Obscured By	Pre-crash Location
Driver's Zip Code	Pre-crash Vehicle Control
Emergency Use	Rollover Type
Fire Occurrence	Special Use
Hazardous Materials Placard Number	Speed Related
Hazardous Materials Placarded	Travel Speed

Vehicle/Driver Level (Continued)

Vehicle Contributing Factors	Vehicle Number
Vehicle Identification Number	Vehicle Role
Vehicle Make	Vehicle Trailing
Vehicle Model	Violations Charged

Person Level

Age	Person's Physical Impairment
Air Bag Availability/Function	Police-Reported Alcohol Involvement
Ejection	Police-Reported Drug Involvement
Injury Severity	Restraint System Use
Nonmotorist Action	Restraint Type
Nonmotorist Location	Seating Position
Nonmotorist Safety Equipment Use	Sex
Nonmotorist Striking Vehicle Number	Taken to Hospital or Treatment Facility
Person Number	Vehicle Number
Person Type	

APPENDIX C ♦ GES TECHNICAL NOTES

Standard Errors

The national estimates produced from GES data may differ from the true values, because they are based on a probability sample of crashes and not a census of all crashes. The size of these differences may vary depending on which sample of crashes was selected. [For a complete description of the GES sampling design, see *National Accident Sampling System General Estimates System Technical Note* (DOT HS 807 796) available from NCSA.] The standard error of an estimate is a measure of the precision or reliability with which an estimate from this particular GES sample approximates the results of a census.

In a report of this size, it is impractical to provide standard errors for each estimate. Instead, generalized standard errors for estimates of totals are provided in the following table. Generalized errors were calculated separately for the crash, vehicle, and people characteristics. The values for the GES estimates and an estimate of one standard error are given in the following table. By adding and subtracting two standard errors, a 95 percent confidence interval can be created for the GES estimates in this report. For example, the estimated number of injury crashes that occurred in the month of February is given in Table 23 as 150,000. To calculate one standard error for this crash estimate, use the table on the following page. Since 150,000 does not appear in the Crash Estimate column, use linear interpolation from the standard error values for 100,000 (8,300) and 200,000 (14,700). One standard error would be approximately 11,500. The 95 percent confidence interval for this estimate would be $150,000 \pm 2 \times 11,500$ or 127,000 to 173,000.

1998 GES Estimates and Standard Errors

Crash Estimate (x)	Crash Standard Error (SE)*	Vehicle Estimate (x)	Vehicle Standard Error (SE)**	Person Estimate (x)	Person Standard Error (SE)***
1,000	400	1,000	400	1,000	500
5,000	1,000	5,000	1,000	5,000	1,000
6,000	1,100	10,000	1,500	10,000	1,600
7,000	1,300	20,000	2,500	20,000	2,400
8,000	1,400	30,000	3,300	30,000	3,200
9,000	1,500	40,000	4,000	40,000	3,900
10,000	1,600	50,000	4,800	50,000	4,600
20,000	2,500	60,000	5,500	60,000	5,200
30,000	3,300	70,000	6,200	70,000	5,900
40,000	4,100	80,000	6,900	80,000	6,500
50,000	4,900	90,000	7,500	90,000	7,100
60,000	5,600	100,000	8,200	100,000	7,700
70,000	6,300	200,000	14,600	200,000	13,200
80,000	7,000	300,000	20,800	300,000	18,400
90,000	7,600	400,000	26,800	400,000	23,500
100,000	8,300	500,000	32,900	500,000	28,500
200,000	14,700	600,000	38,900	600,000	33,400
300,000	20,900	700,000	45,000	700,000	38,300
400,000	27,000	800,000	51,100	800,000	43,100
500,000	33,000	900,000	57,100	900,000	48,000
600,000	39,000	1,000,000	63,200	1,000,000	52,800
700,000	45,000	2,000,000	125,800	2,000,000	101,200
800,000	51,100	3,000,000	191,000	3,000,000	150,200
900,000	57,100	4,000,000	258,600	4,000,000	200,200
1,000,000	63,200	5,000,000	328,600	5,000,000	251,000
2,000,000	125,000	6,000,000	400,500	6,000,000	302,800
3,000,000	189,300	7,000,000	474,400	7,000,000	355,400
4,000,000	255,900	8,000,000	550,100	8,000,000	408,800
5,000,000	324,500	9,000,000	627,500	9,000,000	463,000
6,000,000	395,100	10,000,000	706,400	10,000,000	517,900
6,500,000	431,000	11,000,000	786,900	11,000,000	573,600
7,000,000	467,400	12,000,000	868,900	12,000,000	629,900
*SE = $e^{a+b(\ln x)^2}$, where a = 4.415376 b = 0.034778		**SE = $e^{a+b(\ln x)^2}$, where a = 4.371851 b = 0.035013		***SE = $e^{a+b(\ln x)^2}$, where a = 4.551937 b = 0.033125	

Unknowns

GES data are obtained either directly from an item on the PAR or by interpreting the information provided in the report through reviewing the crash diagram, the Officer's written summary of the crash, or combinations of variables on the PAR. Because of this interpretation, and because the police officer may not have entered some item of information or provide complete information, data can be missing. Two different statistical procedures are used on GES data to complete values for unknown data. These procedures, univariate and hotdeck imputation, are described in a technical report available from NCSA, *Imputation in the General Estimates System* (DOT HS 807 985). The table below gives the reader the proportion of unknown values prior to imputation for variables with imputed values that were used in this report.

Percent of Unknowns for 1998 GES Data Elements

Crash Level			
Alcohol Involved in Crash	3.0 %	Manner of Collision	<0.1 %
Atmospheric Condition	1.6 %	Minute of Crash	0.7 %
Crash Severity	5.7 %	Relation to Junction	0.1 %
Day of Week	0.0 %	Relation to Roadway	<0.1 %
First Harmful Event	0.1 %	Roadway Surface Condition	1.7 %
Hour of Crash	0.7 %	Speed Limit	17.6 %
Light Condition	1.8 %	Traffic Control Device	1.2 %
Vehicle/Driver Level			
Driver Drinking in Vehicle	5.6 %	Rollover Type	<0.1 %
Initial Point of Impact	2.5 %	Vehicle Type	1.6 %
Most Harmful Event	3.8 %		
Person Level			
Age	11.0 %	Seating Position	4.8 %
Injury Severity	5.0 %	Sex	9.0 %
Police-Reported Alcohol Involvement	3.9 %		

Adjustment of Primary Sampling Unit Weights in the National Automotive Sampling System (NASS)

In 1996, both the National Automotive Sampling System (NASS) General Estimates System (GES) and NASS Crashworthiness Data System (CDS) adopted a procedure for assessing and implementing adjustments to the weight assigned to each primary sampling unit (PSU). The procedure attempts to account for shifts in the numbers of crashes that have occurred in the United States since the PSU sample was selected, without performing an actual PSU reselection. In 1996, estimates of injury and property-damage-only crashes from the GES for the years 1993, 1994, and 1995 were revised from those published in earlier editions of *Traffic Safety Facts*. More information on the methodology used and the effect on the estimates for 1993 through 1995 is contained in the NHTSA Research Note, *Reweighting of the Primary Sampling Units in the National Automotive Sampling System* (September 1997).

Because some of the changes that resulted from the 1996 revision were so dramatic, the National Center for Statistics and Analysis (NCSA) decided that adjustments would be made to the PSU weights every 3 years. Adjustments were made again to the PSU weights in 1998. The process used in the 1998 revision continues to monitor and account for shifts in the number of crashes.

As described in the NHTSA Research Note cited above, the NASS is based on a multi-stage probability sample. Periodic maintenance of the sample is required to preserve the integrity of the sample design while minimizing any bias, which can creep in over time. The periodic maintenance includes reviewing state-reported crash data to ensure that all police crash reports qualifying for the GES and CDS are obtained, determining how and when to make adjustments to the weight assigned to each sample PSU without actually reselecting the PSUs, calculating the new PSU weights, and implementing the procedures for adjusting the PSU weights to account for changes in the number of crashes.

In an ideal survey design, the sample sites (PSUs) should be reselected periodically to allow for any shifts in the number and type of crashes occurring across the country. In most surveys this is not practical because of cost, time, and disruption of the data collection process. Because reselection of the PSUs was not possible, the following procedures were used to perform a “pseudo-reselection”:

- NCSA obtained 1995 state data through state agencies for each of the 1,195 PSUs across the United States. The state data gathered included information on fatal and injury crashes.
- For the PSUs within each stratum, the numbers of fatal and injury crashes were summed.
- The probability of a PSU being selected was determined by dividing the number of fatal and injury crashes occurring within the PSU by the total number of crashes

occurring in all the PSUs within that stratum. The weight assigned for each PSU is simply the inverse of the probability of the number of PSUs selected.

The changes in the distribution of crashes were significant enough for the PSU weights to be revised. The new weight revision for the 60 PSUs in the GES was effective beginning in the 1998 data collection year. Because the pseudo-reselection methodology was adopted in 1995, the new weights were phased into the 1996 and 1997 GES data files. The following procedures were used to calculate the adjusted PSU weights:

- For each PSU in the 1996 GES data files, the adjusted weight was calculated using one-third of the new PSU weight plus two-thirds of the old PSU weight.
- For each PSU in the 1997 GES data files, the adjusted weight was calculated using two-thirds of the new PSU weight plus one-third of the old PSU weight.
- For each PSU in the 1998 GES data files, the whole old PSU weight was replaced with the whole new PSU weight.

Effect on Estimates

The implementation of the new PSU weights in the GES resulted in an overall decrease in the estimated number of crashes, vehicles, and persons injured, as compared with the original estimates for 1996, 1997, and 1998. The following tables show the estimates based on the old and revised sampling weights.

Total Motor Vehicle Crashes: Old and New GES Estimates, 1996-1998

	1996	1997	1998
Old Crash Estimates	6,842,000	6,764,000	6,549,000
New Crash Estimates	6,770,000	6,624,000	6,335,000
Percent Change from Old to New	-1.0%	-2.1%	-3.3%

Note: Estimates include fatal crash counts from the FARS.

**Vehicles Involved in Injury and Property-Damage-Only Crashes
by Vehicle Type and Crash Severity: Old and New GES Estimates, 1996-1998**

Year		Passenger Cars	Light Trucks	Large Trucks	Motorcycles
Injury Crashes					
1996	Old Estimate	2,908,000	1,080,000	94,000	51,000
	New Estimate	2,884,000	1,071,000	94,000	52,000
	Percent Change	-0.8%	-0.9%	0.2%	-0.8%
1997	Old Estimate	2,785,000	1,083,000	97,000	52,000
	New Estimate	2,736,000	1,064,000	96,000	51,000
	Percent Change	-1.8%	-1.7%	-1.2%	-2.0%
1998	Old Estimate	2,612,000	1,089,000	90,000	46,000
	New Estimate	2,545,000	1,059,000	89,000	45,000
	Percent Change	-2.6%	-2.7%	-1.8%	-2.8%
Property-Damage-Only Crashes					
1996	Old Estimate	5,346,000	2,303,000	296,000	14,000
	New Estimate	5,281,000	2,274,000	295,000	14,000
	Percent Change	-1.2%	-1.3%	-0.3%	-0.6%
1997	Old Estimate	5,235,000	2,371,000	342,000	11,000
	New Estimate	5,116,000	2,314,000	337,000	10,000
	Percent Change	-2.3%	-2.4%	-1.4%	-2.7%
1998	Old Estimate	5,079,000	2,408,000	326,000	9,000
	New Estimate	4,896,000	2,315,000	318,000	9,000
	Percent Change	-3.6%	-3.9%	-2.6%	-5.3%

**Persons Injured by Person Type and Vehicle Type:
Old and New GES Estimates, 1996-1998**

Type	1996			1997			1998		
	Old Estimate	New Estimate	Percent Change	Old Estimate	New Estimate	Percent Change	Old Estimate	New Estimate	Percent Change
Occupants by Vehicle Type									
Passenger Car	2,478,000	2,458,000	-0.80%	2,378,000	2,341,000	-1.60%	2,258,000	2,201,000	-2.50%
Light Truck	768,000	761,000	-0.90%	768,000	755,000	-1.70%	786,000	763,000	-3.00%
Large Truck	33,000	33,000	0.20%	31,000	31,000	-1.30%	29,000	29,000	-1.80%
Motorcycle	56,000	55,000	-0.80%	54,000	53,000	-2.20%	50,000	49,000	-2.70%
Bus	20,000	20,000	-0.80%	17,000	17,000	0.60%	15,000	16,000	2.10%
Other	4,000	4,000	1.00%	5,000	6,000	5.60%	4,000	4,000	-2.10%
Total	3,360,000	3,332,000	-0.80%	3,253,000	3,201,000	-1.60%	3,143,000	3,061,000	-2.60%
Nonmotorists									
Pedestrian	82,000	82,000	-0.30%	77,000	77,000	0.10%	69,000	69,000	-0.10%
Pedalcyclist	59,000	58,000	-0.70%	58,000	58,000	-0.10%	54,000	53,000	-1.00%
Other	11,000	11,000	-0.20%	11,000	11,000	2.00%	8,000	8,000	-0.60%
Total	151,000	151,000	-0.10%	146,000	146,000	0.10%	131,000	131,000	-0.50%
Total Injured	3,511,000	3,483,000	-0.80%	3,399,000	3,348,000	-1.50%	3,274,000	3,192,000	-2.50%



GLOSSARY

Alcohol Involvement

NHTSA defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a nonmotorist (usually a pedestrian) had a measurable or estimated blood alcohol concentration (BAC) of 0.01 grams per deciliter (g/dl) or above.

NHTSA defines a nonfatal crash as alcohol-related or alcohol-involved if police indicate on the police accident report that there is evidence of alcohol present. The code does *not* necessarily mean that a driver or nonoccupant was tested for alcohol.

Blood Alcohol Concentration

The BAC is measured as a percentage by weight of alcohol in the blood (grams/deciliter). A positive BAC level (0.01 g/dl and higher) indicates that alcohol was consumed by the person tested. A BAC level of 0.10 g/dl or more indicates that the person was intoxicated.

Body Type

Detailed type of motor vehicle within a vehicle type.

Bus

Large motor vehicles used to carry more than ten passengers, including school buses, inter-city buses, and transit buses.

Combination Truck

A truck tractor not pulling a trailer; a tractor pulling at least one full or semi-trailer; or a single-unit truck pulling at least one trailer.

Construction/Maintenance Zone

An area, usually marked by signs, barricades, or other devices indicating that highway construction or highway maintenance activities are ongoing.

Crash

An event that produces injury and/or property damage, involves a motor vehicle in transport, and occurs on a trafficway or while the vehicle is still in motion after running off the trafficway.

Crash Severity

1. *Fatal Crash*. A police-reported crash involving a motor vehicle in transport on a trafficway in which at least one person dies within 30 days of the crash.
2. *Injury Crash*. A police-reported crash that involves a motor vehicle in transport on a trafficway in which no one died but at least one person was reported to have: (1) an incapacitating injury; (2) a visible but not incapacitating injury; (3) a possible, not visible injury; or (4) an injury of unknown severity.
3. *Property-Damage-Only Crash*. A police-reported crash involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries.

Crash Type

Single-vehicle or multiple-vehicle crash.

Day

From 6 a.m. to 5:59 p.m.

Driver

An occupant of a vehicle who is in physical control of a motor vehicle in transport, or for an out-of-control vehicle, an occupant who was in control until control was lost.

Ejection

Refers to occupants being totally or partially thrown from the vehicle as a result of an impact or rollover.

First Harmful Event

The first event during a crash that caused injury or property damage.

Fixed Object

Stationary structures or substantial vegetation attached to the terrain.

Gross Vehicle Weight Rating (GVWR)

The maximum rated capacity of a vehicle, including the weight of the base vehicle, all added equipment, driver and passengers, and all cargo loaded into or on the vehicle. Actual weight may be less than or greater than GVWR.

Initial Impact Point

The first impact point that produced personal injury or property damage, regardless of First or Most Harmful Event.

Injury Severity

The police-reported injury severity of the person (i.e., occupant, pedestrian, or pedalcyclist).

1. Killed (Fatal)
2. Injured (Incapacitating injury, evident injury but not incapacitating, complaint of injury, or injured, severity unknown).
3. No injury.

Jackknife

Jackknife can occur at any time during the crash sequence. In this report, jackknifing is restricted to truck tractors pulling a trailing unit in which the trailing unit and the pulling vehicle rotate with respect to each other.

Junction

Area formed by the connection of two roadways, including intersections, interchange areas, and entrance/exit ramps.

Land Use

The crash location (urban or rural).

Large Trucks

Trucks over 10,000 pounds gross vehicle weight rating, including single unit trucks and truck tractors.

Light Trucks

Trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and utility vehicles.

Manner of Collision

A classification for crashes in which the first harmful event was a collision between two motor vehicles in transport and is described as one of the following:

Angle. Collisions which are not head-on, rear-end, rear-to-rear, or sideswipe.

Head-on. Refers to a collision where the front end of one vehicle collides with the front-end of another vehicle while the two vehicles are traveling in opposite directions.

Rear-end. A collision in which one vehicle collides with the rear of another vehicle.

Sideswipe. A collision in which the sides of both vehicles sustain minimal engagements.

Most Harmful Event

The event during a crash for a particular vehicle that is judged to have produced the greatest personal injury or property damage.

Motorcycle

A two- or three-wheeled motor vehicle designed to transport one or two people, including motorscooters, minibikes, and mopeds.

Motor Vehicle in Transport

A motor vehicle in motion on the trafficway or any other motor vehicle on the roadway, including stalled, disabled, or abandoned vehicles.

Night

From 6 p.m. to 5:59 a.m.

Noncollision

A class of crash in which the first harmful event does not involve a collision with a fixed object, nonfixed object, or a motor vehicle. This includes overturn, fire/explosion, falls from a vehicle, and injuries in a vehicle.

Nonmotorist

Any person who is not an occupant of a motor vehicle in transport and includes the following:

1. Pedestrians
2. Pedalcyclists
3. Occupants of parked motor vehicles
4. Others such as joggers, skateboard riders, people riding on animals, and persons riding in animal-drawn conveyances.

Nonmotorist Location

The location of nonmotorists at time of impact. Intersection locations are coded only if nonmotorists were struck in the area formed by a junction of two or more trafficways. Non-intersection location may include nonmotorists struck on a junction of a driveway/alley access and a named trafficway. Nonmotorists who are occupants of motor vehicles not in transport are coded with respect to the location of the vehicle.

Objects Not Fixed

Objects that are movable or moving but are not motor vehicles. Includes pedestrians, pedalcyclists, animals, or trains (e.g., spilled cargo in roadway).

Occupant

Any person who is in or upon a motor vehicle in transport. Includes the driver, passengers, and persons riding on the exterior of a motor vehicle.

Other Vehicle

Consists of the following types of vehicles:

1. Large limousine (more than four side doors or stretched chassis)
2. Three-wheel automobile or automobile derivative
3. Van-based motorhome
4. Light-truck-based motorhome (chassis mounted)
5. Large-truck-based motorhome
6. ATV (all terrain vehicle, including dune/swamp buggy) and ATC (all terrain cycle)
7. Snowmobile
8. Farm equipment other than trucks
9. Construction equipment other than trucks (includes graders)
10. Other type vehicle (includes go-cart, fork lift, city streetsweeper).

Passenger

Any occupant of a motor vehicle who is not a driver.

Passenger Car

Motor vehicles used primarily for carrying passengers, including convertibles, sedans, and station wagons.

Pedalcyclist

A person on a vehicle that is powered solely by pedals.

Pedestrian

Any person not in or upon a motor vehicle or other vehicle.

Restraint Use

The occupant's use of available vehicle restraints including lap belt, shoulder belt, or automatic belt.

Roadway

That part of a trafficway designed, improved, and ordinarily used for motor vehicle travel.

Roadway Function Class

The classification describing the character of service the street or highway is intended to provide. Includes the following:

Interstates. Limited access divided facilities of at least four lanes designated by the Federal Highway Administration as part of the Interstate System.

Other Freeways and Expressways. All urban principal arterial with limited control of access not on the Interstate system.

Other Principal Arterials. Major streets or highways, many with multi-lane or freeway design, serving high-volume traffic corridor movements that connect major generators of travel.

Minor Arterials. Streets and highways linking cities and larger towns in rural areas in distributing trips to small geographic areas in urban areas (not penetrating identifiable neighborhoods).

Collectors. In rural areas, routes serving intra-county, rather than statewide travel. In urban areas, streets providing direct access to neighborhoods as well as direct access to arterials.

Local Streets and Roads. Streets whose primary purpose is feeding higher order systems, providing direct access with little or no through traffic.

Rollover

Rollover is defined as any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. Includes rollovers occurring as a first harmful event or subsequent event.

Seating Position

The location of the occupants in the vehicle. More than one can be assigned the same seat position; however, this is allowed only when a person is sitting on someone's lap.

School Bus-Related Crash

Any crash in which a vehicle, regardless of body design, used as a school bus is directly or indirectly involved, such as a crash involving school children alighting from a vehicle.

Single-Unit Truck

A medium or heavy truck in which the engine, cab, drive train, and cargo area are all on one chassis.

Trafficway

Any road, street, or highway open to the public as a matter of right or custom for moving persons or property from one place to another.

Vehicle

See *Motor Vehicle in Transport*.

Vehicle Type

A series of motor vehicle body types that have been grouped together because of their design similarities. The principal vehicle types used in this report are passenger car, light truck, large truck, motorcycle, bus, and other vehicle. See the definition of each of the vehicle types elsewhere in this glossary.

Weekday

From 6 a.m. Monday to 5:59 p.m. Friday.

Weekend

From 6 p.m. Friday to 5:59 a.m. Monday.

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